Alberta
CAREER DEVELOPMENT
AND EMPLOYMENT

TRAINING NEEDS ASSESSMENT OF THE CLOTHING AND FOOTWEAR MANUFACTURING SECTOR IN ALBERTA

PREPARED BY

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A MEMBER OF ARTHUR YOUNG INTERNATIONAL

DECEMBER, 1988

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December 13, 1988

VIA COURIER

Private & Confidential

Ms. Karen Fetterly
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Dear Karen:

Re: Assessment of the Training Needs of the
Alberta Clothing and Footwear Industry

We have enclosed our final report on the training needs of the clothing and footwear manufacturing industry. In our report, we have presented our recommendations under 3 scenarios, those being:

Scenario 1	Government assigns a high priority to industry
Scenario 2	Government is uncertain as to the level of priority to assign
Scenario 3	Government assigns a medium priority to the industry

We have enjoyed working with you and the Steering Committee on this important project and look forward to working with you again.

Yours very truly,

Woods Gordon

WOODS GORDON

Enclosures

Woods Gordon

TRAINING NEEDS
CLOTHING AND FOOTWEAR
MANUFACTURING SECTOR

Prepa..d for

ALBERTA CAREER DEVELOPMENT AND EMPLOYMENT

December 13, 1988

Woods Gordon

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EXECUTIVE SUMMARY

The clothing and footwear manufacturing industry in Alberta is one of the smaller elements of the manufacturing sector in Alberta. There are approximately 200 firms employing 2,800 people throughout the province. Sales levels for the industry are estimated in the range of $130 to $140 million. The industry is composed of a large number of small firms: 90% of businesses have less than 25 employees. The 22 firms with greater than 25 employees represent 70% of the employees. The Woods Gordon survey involved 100 Alberta manufacturers and accounted for over 84% of the employees in the industry. It involved 14 educational institutions in Alberta as well as a selected number of institutions and manufacturers in central Canada.

Most of the positions in the industry are at the production level. Training for these positions is generally done on-the-job by Alberta manufacturers. This method of training seems to be the most effective given the lack of training programs available and the variety of skills required by Alberta garment manufacturers.

English as a second language was noted as a issue in about one third of Alberta garment manufacturing firms. ESL tended to be an issue in those firms with greater than 25 employees. The group that thought ESL was an issue represent 65% of the employees in the industry. Approximately half of the companies with 25+ employees indicated that they would be receptive to ESL training. Overall, in-house training was preferred by companies with over 25 employees.

The industry is anticipating favorable growth prospects for the next few years. Next year, the surveyed group expects growth of 22% in employment or 515 jobs. In three years growth for the surveyed group is anticipated at 62% or 1,515 new jobs (the largest 20 firms account for one-half of the new jobs). It is beyond the scope of this assignment to determine whether this growth will in fact occur. However, it appears likely that for firms for which growth is possible, certain positions will be more important than others.

The positions most difficult to fill at present are those of sewer, pattern maker and cutter. Reasons for this shortage include: low wages, poor image of the industry; no industry base to draw from and few training programs available for these skills.

The same three positions mentioned above: sewers, cutters and pattern makers, will be required as the vast majority of new jobs created will be at the production level. In our view, the other key positions will be production manager, floor supervisor and marketing personnel to provide strong management to stabilize growth. These positions have been identified as somewhat difficult to fill at this time but were underemphasized by the survey participants in our view. Finally, human resource training is an additional training requirement of the industry. More specifically, human resource training is the training of management to train their employees more effectively and efficiently.

Overall, the number of people requiring training yearly is relatively low in number but high in relation to total number of people employed in the industry. Anywhere from 370 to 720 individuals annually (13% to 21% of total existing employment in the garment manufacturing industry) will require training over the next three years with some potential for reduction after that time.

Through the course of our research, we have identified seven positions for which training is required and have made an estimate of the magnitude of that training need. Schedule 1 indicates the positions requiring training and the number of individuals involved.

SCHEDULE 1
NUMBER OF EMPLOYEES REQUIRING TRAINING BY POSITION

Position	Range
Sewers	200 - 400
Cutters	40 - 80
Pattern makers	50 - 90
Floor supervisors	10 - 30
Production management	12 - 40
Marketing management	40 - 50
Human resource management	20 - 30
Total	**372 - 720**

There appears to be no institution that is a leader in meeting the training needs of the industry. Programming is fragmented with a number of institutions offering training for some positions and none for others (such as production management).

Discussions with industry and institutions indicated that there appears to be very little contact between these two groups. The industry is currently unaware of existing programming but at

the same time, they think it is inadequate. Comments on existing programs were generally not positive and emphasized the idea that these programs are usually too theoretical.

Discussions with manufacturers outside the province indicate that the training problems facing Alberta are not unique. Manufacturers outside the province have experienced difficulty recruiting sewers and in finding experienced production managers. Their reasons are similar to those of Alberta manufacturers such as the concern that the industry has a poor image or that wages are usually lower than those paid in other industries. Also, in-house and on-the-job training, the training method used by most Alberta manufacturers, is commonly used throughout the industry in Canada as a means of ensuring that firms have trained, competent employees.

Our review of training programs in place outside the province indicated that most schools tend to emphasize production management programs to a greater extent than is offered here. These programs tend to be two to three years in length and usually include a practicum component. A few training programs for production level jobs are available. However, as has been expressed by manufacturers and training institutions here, there is difficulty attracting students to these courses. George Brown College in Ontario is the only college offering sewing classes. In their case, enrollment declined significantly when federal funding of participants was cut-off. Class fees have been reduced to $18/week but enrollments have still not increased substantially.

A review of the impact of the Free Trade Agreement (FTA) on Alberta garment manufacturers indicated that the FTA needs to be considered in light of an individual firm's circumstances. The FTA requires some response from all companies who rely on markets beyond Alberta whether they be national or international. Therefore, it is just another competitive factor that must be considered in the industry's evolution.

To identify the type of effort required of Career Development to meet the training needs of the industry we have outlined our recommendations under 3 scenarios. It is desirable that the Department provide the coordinational effort required to set programs in place. However, their involvement in this role will not be on-going but should be viewed as an "investment" for ensuring that the industry's training needs are met.

A preliminary review of the existing departmental programs indicates that many of the initiatives recommended may be eligible for funding under these programs. It may be

necessary to make exceptions to existing program guidelines (such as increase funding levels) to ensure that these initiatives are funded under these existing programs. A summary of the two scenarios are as follows:

Scenario 1 - High priority assigned to the clothing and footwear industry by Government

- development of a training centre combined with an awareness centre
- development of production management program

Scenario 2 - Government is uncertain as to the level of priority to assign

Sewers

- Coordinate the development of industrial sewing classes in Edmonton and Calgary, to be delivered by either SAIT, Calgary School Board Continuing Education and/or Edmonton School Board Continuing Education.
- Support vestibule and on-the-job training possibly through the Alberta Training Program.
- Disseminate information on these programs.

Marketing

- Identify 2 or 3 generic marketing courses available through Continuing Education and provide some financial assistance to attend. Inform manufacturers that these courses are available.
- Facilitate the development of short courses specific to the industry and provide some assistance to manufacturers to attend.
- Program development costs might be eligible for funding under the Program Support Component of the AVT program.

Production Management

- Facilitate the development of "short courses" in production management specific to the industry.
- Program should be delivered by either FAD, the Fashion Council, or Alberta Fashion Educators.
- Funding should be accessed from the Program Support component of the Alberta Vocational Training Program.

Cutters

- Vestibule and on-the-job training should be supported by Career Development.
- Assistance to manufacturers may be available from the Alberta Training Program.
- Vestibule training should be done through a contract trainer.

Floor Supervisor

- Support for on-the-job training of floor supervisors. Financial support may be available from the Alberta Training program.

- The Department should identify courses offered through Continuing Education that provide supervisory skills and should relay information on these courses.

Pattern makers/grading

- Provide information on pattern making courses currently in place.

- Inform institutions that are providing pattern making classes that the industry does not perceive these courses as providing the necessary technical skills and that adjustments to the pattern making component might be considered.

Human Resources Training

- Facilitate the development of short courses to "train the trainers" through the development of short courses offered through seminars delivered by one of the associations.

- Funding for program development may be available under Career Development's Program Support program.

English as a second Language Training

- ESL training should be done on an ad hoc basis and conducted on the premises of larger firms interested in providing the training.

Scenario 3 - Medium priority assigned to industry

As a third alternative a phased approach to training and awareness development could be employed. The elements of this scenario include:

- implement the recommendations under Scenario 2 in year 1,

- initiate the planning for the development of a diploma program in production management in year 2,

- initiate planning for the development of the awareness centre in year 2 and study the support for programs developed in year 1,

- evolve the awareness centre into a training centre by incorporating the training programs developed under Scenario 2 after they have been accepted by industry.

The selection of the scenario really depends on the level of priority the government assigns to the industry. As the scope of this study did not include review of the industry's outlook, or a detailed review of policy choice theory, we are unable to assess whether or not the industry should be assigned a high priority by government. Therefore, as a minimum we recommend that the Department pursue the recommendations highlighted under Scenario 2 initially. If at a later date the government decides to undertake initiatives to stimulate the industry, most of the initiatives (with the exception of on-the-job and vestibule training support) can be transferred to the training centre with little disruption as indicated in Scenario 3.

1.0 INTRODUCTION

In August 1988 Woods Gordon was engaged by Career Development and Employment to assess the training needs of the Alberta clothing and footwear manufacturing sector. The objectives of the study were as follows:

1) To identify and describe the major trends in the demand for skills - both current and emerging - in Alberta's clothing and footwear manufacturing industry.

2) To outline the training requirements associated with these trends and the barriers firms face in meeting these requirements.

3) To identify opportunities for enhancing training programs so as to most effectively meet the needs of the clothing and footwear manufacturing industry.

The analysis undertaken to satisfy these objectives encompassed considerable data collection. The process involved interviews with 100 Alberta manufacturers, a review of existing training programs in place in Alberta; and an environmental assessment to identify training models in use elsewhere in North America. The data tables generated from the 100 interviews are appended.

We would like to express our thanks to the representatives on the Steering Committee for their interest and input into the study.

2.0 APPROACH AND METHODOLOGY

2.1 Approach

We selected a four phase approach to the study:

Phase 1 - Survey of 100 garment manufacturers
Phase 2 - Educational assessment
Phase 3 - Environmental assessment
Phase 4 - Analysis

In the first phase we undertook a survey of 100 garment manufacturers located throughout the province. The interview program was conducted in person with 44 of the firms and by telephone for the remaining 56.

The Educational Assessment phase was conducted using both primary and secondary research. Twelve training institutions in Alberta were contacted. The purpose of the interview program was to assemble information on the current programming, identify planned program changes and determine interest in providing unique training programs for the industry. The second task was to conduct desk research to review the program contents through published material.

The third phase of the approach was the Environmental Scan. The purpose of this phase was to identify the training models in use elsewhere in North America. To identify these models we interviewed manufacturers in Quebec and southern Ontario, talked to a number of institutions providing training for the industry, and contacted Industry Associations in Canada and the United States to identify their training initiatives.

The final phase involved extensive analysis of survey and interview data, and preparation of this report.

2.2 Methodology

2.2.1 Introduction

The study was conducted utilizing a four phase approach, that being 1) industry survey; 2) educational assessment; 3) environmental assessment; and 4) analysis.

2.2.2 Industry Survey

The first task of the interview program was to prepare an extensive list of the names of manufacturers and designers located in Alberta. That list was compiled using the following sources:

1) Fashion Alberta Vol.2 1988; Alberta Economic Development and Trade.
2) Alberta Bureau of Statistics; Maria Sawchuk, Information Officer.
3) Statistics Canada, Catalogue 31-203.
4) Telephone Directories for Edmonton, Calgary, Red Deer and surrounding area, Grand Prairie/Peace River and Lethbridge.
5) Scott's Directories.
6) Frasers Directories.
7) Alberta Economic Development and Trade; Holly Palmer

The second task was to mail letters to the 254 potential manufacturers on the list to solicit their support for the study and provide an introduction for the consultants who would be conducting the interviews. A separate letter referencing the Kurt Salmon & Associates study was sent to those manufacturers that participated in the KSA study.

A draft survey instrument was then prepared and tested on representatives from the five manufacturers on the Steering Committee: Peach Blossom Clothing; Sun Ice; Levi Strauss, Emery Manufacturing and EFX Marketing Ltd. The interview guide was then revised and approved by the Management Committee.

A total of 101 interviews were then conducted either by telephone (57) or through personal interviews (44). One interview was subsequently eliminated from analysis as the firm was not actually manufacturing but rather importing goods and applying crests.

The survey comments were compiled using the FAST FORMS program and exported to an EXCEL file where the data was manipulated using the database functions.

2.2.3 Educational Assessment

To determine what training programs were available we conducted a series of personal interviews with individuals from 12 Alberta institutions. The purpose being to review

applicable skill training, confirm what should be provided and how that training might be or should be provided from the suppliers viewpoint. Interviews were conducted with the following people:

Alberta Fashion College: Ms. Marcie Hett.

Calgary Board of Education, Division of Further Education: Ms. Maureen DeSourcy.

Form and Function Design Academy: Ms. Bente Pilgaard and Henning Nielsen.

John Casablancas Modelling and Fashion Career College: Ms. Nichole Nowakowski.

Mithe De Fontenay Unique Fashion Centre Couturier Fashion Designing Course: Ms. Mithe De Fontenay.

Mount Royal College: Ms. Marlene Dreher.

Northern Alberta Institute of Technology: Mrs. Aldi Radicchi.

Olds College: Ms. Gloria Ulray.

Southern Alberta Institute of Technology: Ms. Noreen Rockafellow.

University of Alberta: Ms. Gail Bachynski.

Edmonton Public Schools, Division of Continuing Education: Ms. Pat Steblik.

Grouard Alberta, Alberta Vocational Centre: Ms. Mary Perriard.

YMCA Sewing Program: Ms. Mable.

Also, interviewed by telephone were representatives from industry associations in Alberta. These interviews were conducted with:

Damien Tilosnec: Foundation of Alberta Designers
Bev Hunter: Edmonton Fashion Council
Julie McPhail: Calgary Fashion Council
Marcie Hett: Alberta Fashion Educators

The second task in this phase involved desk research. Course calendars and the unpublished directory from Alberta Fashion Educators were reviewed.

2.2.4 Environmental Review

The purpose of this stage was to identify training models in place elsewhere in North America. To conduct the research we contacted government representatives, trade

associations, manufacturers and a number of educational institutions to determine what models are currently in place. For the environmental review phase we contacted the following:

Government Departments:

Industry Science and Technology
Labour Market Services Group, CEIC

Trade Associations:

American Apparel Manufacturers Association - Education Committee (Virginia)
Apparel Manufacturers Association of Ontario (Toronto)
Canadian Shoe Retailers Association (Toronto)
Centre de Developement des Industries de la Mode (Montreal)
Footwear Leather Institute of Canada (Montreal)

Manufacturers:

Arrow Shirts (Kitchener)
Copley, Noyes and Randall (Hamilton)
Levi Strauss (Stoney Creek)
Peerless (Montreal)
Thomas-Wallace Shoes (Montreal)

Educational Institutions:

Fashion Institute of Technology (New York)
George Brown College (Toronto)
Lasalle College (Montreal)
Philadelphia College of Technology and Science (Philadelphia)
Ryerson Polytechnical College (Toronto)
Southern Technical Institute (Marietta, Georgia)
York Learning Centre

Others:

Centre Specialise De La Mode Du Quebec (Montreal) - Shirley Packer
B. Bessim and Associates - Bessim Bessim

2.2.5 Analysis

The information gathered from all phases was analyzed. A presentation of findings was made to the Steering Committee for purposes of discussion and feedback on November 7, 1988. We then prepared a draft report. The draft was reviewed by the Management Committee and finalized. The final report was subsequently presented to the Steering Committee.

3.0 SURVEY OF THE INDUSTRY

3.1 Introduction

One hundred of an estimated 200 garment manufacturers located in Alberta were interviewed for purposes of this report. (The target population of 254 turned out to have a number of establishments that either did not meet the definition or were no longer in business). The group surveyed represented 2,340 employees or 84% of those estimated to be employed in the industry. Combined sales for those surveyed and not surveyed are estimated to be in the order of $130 to $140 million. Detailed tables presenting the results of the interviews are located in Appendix 1. We believe the survey can be considered representative of the industry.

The group was fairly evenly divided geographically. In Calgary 44 were interviewed, 45 in Edmonton and 11 outside these two major centres.

Most of the businesses surveyed were fairly new businesses (46% established in 1985 or later). Approximately one-quarter were established prior to 1970.

We analyzed the number of businesses and employees in the industry. It is estimated that there are approximately 2,800 employees working in 200 businesses throughout Alberta (**Schedule 1**). We estimate that the 2,800 employees in the industry are employed in the tasks as outlined in **Schedule 2.** As the schedule indicates, approximately 2,000 persons are employed in production level jobs. It should be noted that the same individual may be undertaking one or more of the following jobs.

SCHEDULE 2
GARMENT INDUSTRY
ANALYSIS OF EMPLOYMENT BY POSITION

Designers/pattern making/grading/marking	200
Production supervision	200
Cutting	200
Sewing/finishing/bundling	2,000
Management/marketing	200
Total population	2,800

* Total sample: 2,341 employees representing 100 firms. Balance of population is estimated to be approximately 455 persons.

3.2 Existing Training Methods

Survey participants were asked what form of training methods they currently use. The majority (66%) use an informal, on-the-job approach to training employees. This training usually consists of the demonstration and monitoring of the progress of new employees by supervisors or more experienced personnel. This technique seems to be the most effective way for an employer to ensure that their employees have the training required for their company. For example, many experienced sewers are unfamiliar with working with certain fabric types or certain machines. On the job training has been the training method used to provide the "company specific" training currently not available from institutions.

Other forms of training in use by the industry are outlined in **Schedule 3.**

SCHEDULE 3
ALBERTA GARMENT MANUFACTURERS
EXISTING TRAINING METHODS

Type	Number providing this type
On-the-job	68
None	19
In-house	9
Community based	3
Books/manuals	2
Institution	2
Industry	1
No response	4

*Note: Seven companies provided more than one answer.

As **Schedule 3 indicates, 19 firms** are not providing any training at all. Most of these firms are relatively small (less than 10 employees) and tend to hire experienced staff to avoid training costs and the time involved in providing that training.

For the eight firms that indicated they provided in-house training, only one had a formal course that it offered regularly to new employees. Most of the remaining firms held classroom sessions occasionally and usually for the training of specific techniques such as hat making or appliques.

As only two firms have sent employees on courses (one to NAIT for pattern making) it appears that local institutions are not being used as a means of upgrading or training employees. Only one firm is using state of the art training techniques, that being linear videos for training mechanics. These videos were developed by the firm rather than through the development of computer aided instruction available through consultants such as Kurt Salmon & Associates and, B. Bessim and Associates Inc. of Montreal.

3.3 Positions for Which Respondents had Difficulty Recruiting

To determine existing skill shortages we asked manufacturers if they had experienced any difficulty recruiting employees for certain jobs and, if so, which jobs and why. In response to these questions, 70% indicated that they had experienced difficulty recruiting. The remaining 30% who indicated no difficulty, were firms of less than 12 employees. Larger firms have experienced difficulty for a number of reasons including high turnover and therefore the sheer volume of the requirement for staff.

Schedule 4 outlines the eleven positions for which respondents had difficulty recruiting. It should be noted that many respondents identified more than one position so that totals do not sum to 100.

SCHEDULE 4
POSITIONS FOR WHICH RESPONDENTS HAD DIFFICULTY RECRUITING

	Number of Responses
Sewer	43
Pattern making/grading	9
Cutter	9
Production management	8
Sales	7
Embroidery/cresting	6
Sample maker	5
Supervisors	5
Maintenance	5
Management	3
Unskilled positions (presser, etc.)	3
Other*	13
Reported no difficulty	30

* Millinery work, knitting, stock people, janitor, artists, etc.

As **Schedule 4** indicates, sewing is the primary position for which manufacturers have experienced difficulty recruiting. Pattern making/grading, cutting and production management were also noted as key positions for which recruiting has been difficult.

A variety of reasons were quoted as to why they had experienced difficulty recruiting for certain positions. A selection of comments by position are as follows:

Sewers

- Skill level required varies from one company to another (ie., whole garment or single seam).
- Some experienced sewers are not qualified to work on certain types of fabric.
- Low wages.
- Poor image of the industry.
- Lack of skilled workers available in the province.
- High turnover, therefore sheer volume of the requirement.
- Many unskilled workers apply but do not have the skills, desire required.
- Decreasing immigration levels.

Pattern maker/Grader

- Lack of qualified individuals.
- Design schools tend not to emphasize technical skills.
- Grading is a skill but not taught in Alberta.

Cutter

- Not a skill taught in Alberta.
- Years of experience are required to minimize fabric wastage.
- Few people have the combination of skills required to both cut and mark.

Floor Supervisor

- Must be someone who can speak English, can sew well and have the supervisory skills for the position.
- No industry base to draw from.
- Few sewers have supervisory skills.

Machine Maintenance (usually contracted out)

- Not a skill taught in Alberta.
- High level of experience is required.

Production Management

- No local training.
- Lack of experienced people.

Many of the reasons for experiencing difficulty in recruitment are valid. For example, low wages do seem to affect a firm's ability to attract and keep employees. Some of the firms that indicated that they had no difficulty attracting sewers usually paid in excess of $6.50 or provided some additional benefits to employees such as a dental plan, ESL courses or security (union). Other comments repeated to us are not necessarily valid, such as the comment that grading is not taught in Alberta as it is offered through NAIT Continuing Education.

A review of the prior training of employees indicated that the majority of those employed in sewing in Alberta are immigrants especially from Southeast Asia. The industry may be dominated by immigrants because many immigrants have received training and experience for the industry in their native countries. Training programs should be targetted to this group because they may have the requsite skills and experience for the position of sewer and, they may not be deterred by what is percieved as low wages and a poor image as the wages and working conditions in Alberta manufacturing firms may be better than those they have worked under to date in their native lands.

Respondents were asked if they ever recruited outside the province. Only 19 indicated that they had. About one-half of those that did recruit from outside were firms of 25+ employees, likely due to the fact that the cost of relocating employees is beyond the means of smaller firms. Positions for which recruitment outside the province was undertaken included: designers, sales people, production management, mechanics, line manager and tailor. Table 14A in Appendix 1 outlines the survey results.

When asked for the methods of recruitment used to attract employees, newspaper advertising, word of mouth, manpower and "walk ins" were most frequently noted. Only seven firms indicated that they contacted educational institutions as a method of recruiting (data Table 14B Appendix 1). The results are as follows:

Newspaper advertising	43
Word of mouth	34
Manpower / UIC	24
Approached by applicant	10
Ethnic newspaper ads	8
Educational institutions	7
Industry reference	5
Immigration societies	5
Other	10

3.4 Industry's Opinion on Their Growth Prospects

The majority of Alberta clothing manufacturers (77%) believe that their growth prospects are favorable. Only eight felt the outlook was unfavorable, while 13% were unsure. Some of the reasons indicated for this optimism are as follows:

- Restructuring of management will result in a doubling of sales;
- Plan to expand by increasing territories;
- We are adding new lines all the time;
- We have opened two export offices;
- Hope to have good growth into the U.S.;
- We will achieve vertical growth through retail and wholesale;
- We will have a bigger market with free trade.

To try to quantify this growth, manufacturers were asked to project employment levels for next year and in three years. They were then asked what positions these new employees would fill. Overall, the industry is projecting growth in employment levels of about 22% for next year or 515 new jobs. In three years, an increase of 62% is anticipated. Over one-half of this growth can be accounted for by the 19 firms with greater than 25 employees. This analysis is based on data extracted from Table 19 Appendix 1.

3.5 Positions for Which Growth in Employment Levels is Anticipated

Growth in employment levels will be mainly at the production level, more specifically, in sewing. Other positions where growth will occur include cutting, sales and marketing, pattern making, and designing. Many of the respondents indicated that they think it will be difficult to find experienced people to facilitate the anticipated growth. Schedule 5 presents the survey responses to positions indicated as key to growth.

SCHEDULE 5
POSITIONS INDICATED AS KEY TO GROWTH

Positions	Responses
Sewers	62
Cutters	20
Sales	10
Pattern makers	8
Designers	7
Clerical	7
Floor supervisors	4
Management	3
Shippers/receivers	3
Low skill jobs	3
All positions	2
Mechanic	1
Other	15

3.6 Career Pathing

The survey asked employers what a typical career path in their organization was. Most identified sewer to floor supervisor as the typical career path that almost never progressed beyond that point. A variety of career paths were identified (Appendix 1 Table 10) and tended to depend on company size. About one-third indicated that there was no career path at all. These tended to be smaller firms.

Along with the question of career paths, we asked about the factors that tended to inhibit employee promotion. Reasons most frequently noted included lack of English skills, lack of skill, lack of desire and no position in which to be promoted. Table 11 in Appendix 1 presents the data on factors inhibiting promotion.

3.7 English as a Second Language

To identify the need for English as a second language (ESL) training we asked the industry if ESL was an issue for their organization, if it would be beneficial to the organization to provide ESL training, if they would be receptive to providing that training and how ESL training should be implemented.

About one-third of respondents indicated that ESL was an issue for their organization while two-thirds indicated it was not. ESL tended to be an issue in firms with greater

than 25 employees. Of the 19 firms surveyed from this group, 85% felt ESL was an issue. The group that felt it was an issue represent 65% of the employees in the industry. When asked if it would be beneficial to the employer to provide ESL training for employees, 56% believe it would not be beneficial (29% said yes, 14% did not know). Approximately half of the companies with 25+ employees indicated that they would be receptive to ESL training.

When asked how ESL training should be implemented, 40 respondents answered. Institutional training was preferred overall. However, in-house training was preferred by companies with over 25 employees.

The results of the survey indicate that if ESL training initiatives undertaken for the industry at all, they should be done on an ad hoc basis and conducted on the premises of larger firms interested in providing the training.

3.8 Type of Training Requested

Table 22 in Appendix 1 reviews the types of training effort requested by Alberta Manufacturers. The results indicate that institution-based training (45 times) and in-house training (35 times) were the most frequently requested forms of training. 13% of respondents indicated that training was not a concern usually because they either hired skilled employees or had no difficulty attracting people. A review by company size indicated that small firms preferred institution-based training as it was less disruptive than in-house training.

Overall, there appears to be a preference to train sewers in-house to meet the specific training needs of the company (ie., fabric type, variety of tasks). For such skills as pattern making, grading and designing, institution-based training was preferred.

3.9 Voluntary Certification Scheme

The respondents were asked if they would support a voluntary certification scheme for skills. The response was positive, 62% said they would support it. Some felt it would be a good means of screening applicants. However, as sewers are in short supply, most firms hire even unskilled people willing to work so a screening tool is not really useful.

Some concern was expressed as to how such a scheme would be implemented as the variety of skills required between firms varies so much.

When asked informally if they thought that their employees would pursue such a scheme on their own initiative, the overwhelming response was no unless it somehow guaranteed a higher wage.

3.10 Government Training Programs

When asked generally if manufacturers thought that government sponsored training efforts were adequate, 48% indicated that they did not know what was being done and 27% indicated that they did not think existing efforts were adequate. Many of the comments center around the fact that they do not know what is being done by government. However, in contrast to these comments is the fact that about two thirds of Alberta garment manufacturers have accessed government training or subsidy programs. When asked for the name of these programs many had difficulty recalling the program name. For those that did recall, the Alberta Wage subsidy program was most frequently noted. We were unable to determine what type of marketing initiative would be required to reach garment manufacturers. When asked about the concerns with these programs, respondents noted the following:

- difficult to find out what is available
- successful if you could screen applicant before hiring
- favourable impression since these programs help subsidize wages (helps him financially)
- very helpful for small business to find extra employees: and to train them (Alberta Wage subsidy and Youth Training)
- we are not eligible for any programs
- paper burden
- we have had problems recruiting people from UIC, they are not motivated

3.11 Conclusions

The garment manufacturing industry in Alberta is one of the smaller manufacturing sectors in Alberta (see table opposite). There are approximately 200 firms employing 2,800 people throughout the province. Sales levels for the industry are estimated to be in the area of $130 to $140 million. The industry is composed of a large number of small

firms: 90% of businesses have less than 25 employees. The 22 firms with greater than 25 employees represent 70% of the employees.

Most of the positions in the industry are at the production level. Training for these positions is generally done on-the-job by Alberta manufacturers. This method of training seems to be the most effective given the lack of training programs available and the variety of skills required by Alberta businesses.

The positions most difficult to fill at present are those of sewer, pattern maker and cutter. Reasons for this shortage include: low wages, poor image of the industry, no industry base to draw from and few training programs available for these skills.

The industry is anticipating favorable growth prospects for the next few years. Next year, the surveyed group expects growth of 22% in employment or 515 jobs. In three years growth is anticipated at 62% or 1,515 new jobs (the largest 20 firms account for one-half of the new jobs). We are unable to determine whether this growth will in fact occur. However, it appears likely that for firms for which growth is possible, certain positions will be more important than others.

In our view, the key positions will be production manager, floor supervisor and marketing personnel to provide strong management to stabilize growth. These positions have been identified as somewhat difficult to fill at this time but were underemphasized by the survey participants in our view. In addition to these three positions, sewers, cutters and pattern makers will be required as the vast majority of new jobs created will be at the production level.

Human resource training is an additional training requirement of the industry. More specifically, human resource training is the training of management to train their employees more effectively and efficiently.

English as a second language was noted as a issue in about one third of Alberta garment manufacturing firms. ESL tended to be an issue in those firms with greater than 25 employees. The group that thought ESL was an issue represent 65% of the employees in the industry. Approximately half or the companies with 25+ employees indicated that they would be receptive to ESL training. Overall, in-house training was preferred by companies with over 25 employees.

4.0 EDUCATIONAL ASSESSMENT

4.1 Introduction

The study process involved a review of Alberta educational institutions that are providing training for the industry. The review involved discussions with representatives of 12 programs to identify the training being provided for specific jobs. This section provides a description and analysis of these programs as well as a review of some of the comments on these programs made by members of the industry.

4.2 Description of Programs

For purposes of this report we have summarized the highlights of the training programs in place in Alberta. Details on any specific program can be reviewed from program calenders placed on file with Career Development and Employment.

4.2.1. Program Details

Olds College

- Program is two years in fashion merchandising.
- Provides basic knowledge and skill development in merchandising, clothing construction and textiles. Students can be assistant designers and alterationists.
- Very open to changing the program.
- Emphasis is on the practical skills.
- Program capacity 72 students, usually accept 55 students.

Form and Function Design Academy

- Professional level program geared toward fashion design training.
- Course is two years and trains designers. Emphasis is on design, not technical skills (drawing, illustration, design, pattern making, construction, textile technology, costume history, business).
- Curriculum developed in context of international design.
- Program usually graduates 24 students.

Woods Gordon

Mithe De Fontenay Unique Fashion Centre Couturier Fashion Designing Course

- Design school with emphasis on pattern drafting and grading.
- Most graduates open their own business.
- Not certified under student loans program.
- Willing to modify program to suit needs.
- 14 students is the capacity of the program.

Continuing Education - Edmonton Public Schools

- Certificate sewing program.
- Upgrading classes.
- Very flexible programming.
- Considering adding a program for alterationists and seamstresses.
- Have sewing labs for training purposes.
- Would be willing to run Training Centre (co-ordination, administration, instruction, facility).
- 100 courses in sewing offered to 1,200 students.

John Casablancas (Edmonton and Calgary)

- Focus is on merchandising.
- Some training in pattern making, design and textiles.

Grant MacEwan

- Fashion illustration, including design concepts.

Alberta Fashion College

- Fashion merchandising (6 month course) with comprehensive training in fashion, retailing, marketing, promotion.
- Fashion illustration and design program.
- Some training in pattern making.
- Program capacity - 8 students.

Woods Gordon

NAIT Tailoring Program

- Career oriented.
- Program trains for positions as alterationists, tailors or home sewing for the cottage industry.
- Program cannot be altered or extended.
- Program capacity: 22 students.

University of Alberta

- Training is in textiles and fabric. The training is not specific or technical. Most students go into retail or marketing.
- Part of Bachelor of Science, in Home Economics course.

Calgary Continuing Education

- Clothing and textile certification program (haute couture).
- Setting up industrial sewing course.
- Offers courses in pattern making.

SAIT

- Certificate course in apparel manufacturing skills.
- Pattern drafting/flat pattern design techniques.
- Garment construction using industrial sewing equipment/techniques.
- Industrial related pattern grading.
- General study of textiles.
- Various aspects of production manufacturing.
- Program capacity: 16 students.

Mount Royal, Continuing Education

- Fashion merchandising certificate program.

Alberta Vocational Centre: Grouard

- Clothing and textile, design and construction program, which utilizes a native motif when appropriate.

SCHEDULE 6
ALBERTA INSTITUTIONS PROVIDING
TRAINING FOR THE GARMENT INDUSTRY

	Design	Grading	Pattern making	Textiles	Industrial sewing	Whole Garment sewing	Cutting	Alter-ation	Merchan-dising	Producti
NAIT			S			P		P		
Alberta Fashion College	P	S	S			S	T		P	
Form and Function	P		S	S		S			S	
Grant McEwan	T									
John Casab. (Edmonton) (Calgary)	S S		S S	S S					P P	
Mithe De Fontenay	P	S	S							
Calgary Continuing Ed.			T	P	P	P				
Olds College	S		T	S		S		S	P	
Mount Royal College									P	
SAIT	P	S	S	S	S	P		S	S	
U of A	S		S	S		S		S	S	
Edm. Public Cont. Ed.	T		S			P		S	S	
AVC: Grouard				P		P				
YMCA - Edmonton								P		

Assumes entry level positions (i.e. asst. designer)

P = Primary
S = Secondary
T = Tertiary

SCHEDULE 6A: ALBERTA TRAINING PROGRAMS

	Personal Interest/ Career Related	Formal/Adhoc Programs	Fee	Dates	Location	Prerequisite	Work Study
S.A.I.T. (A)	Personal Interest	Adhoc	$70-$126/course	Sept-Dec;Jan-Mar; Apr-Jun (5 hours/course)	Calgary	From no experience to advanced	None
S.A.I.T. (B)	Career Related	Formal	$1470 for 12 weeks	Sept-Dec;Jan-Mar; Apr-Jun (360 hours)	Calgary	None	None
FORM & FUNCTION	Career Related	Formal	$4000/year	Sept & Jan start dates (approx 700 hours)	Calgary	High School Diploma; Portfolio submission	None
CALGARY CONTI-NUING EDUCATION	Personal Interest/ Career Related	Adhoc	Varies with length of program.	Sept,Jan,Apr start (Career Related: 80 hrs training/70 hrs apprenticeship)	Calgary	None	None
MOUNT ROYAL	Career Related	Adhoc	$660/7 courses	Fall, Winter,Spring (108 hrs/7 courses)	Calgary	18 yrs of age plus	None
OLDS COLLEGE	Career Related	Formal	$757/year tuition	September (approx 840 hrs/yr)	Olds	High School Diploma; Grade 11 Math	Yes
AVC: GROUARD	Career Related	Formal		September,June	Grouard	Grade 10	None
EDMONTON CON-TINUING EDUC.	Personal Interest/ Career Related	Adhoc	Varies	Fall, Winter, Spring (course length varies)	Edmonton	18 yrs of age plus	None
GRANT MacEWAN	Personal Interest	Formal	$95/course	Sept start date (24 hours/course)	Edmonton	Basic Drawing Skills	None
U OF A	Career Related	Formal	Varies	Fall, Winter, Spring (approx 400 hrs/yr; 4 year program)	Edmonton	Must meet university admission require-ments	Yes
J.CASABLANCAS	Career Related	Formal	$3330 including books	Sept,Jan,Mar,July (approx 650 hours)	Edmonton	Must pass math quiz and write an essay.	None
ALBERTA FASHION COLLEGE	Career Related	Formal	$3,150	Intakes occur every 2 mths beginning in Sept	Edmonton	High School Diploma	Yes

A: Individual Courses
B: Full-time 12 Week Program

4.2.2 Program Elements

To review the various program elements, we developed a matrix showing the Alberta educational institutions and the positions for which training is provided. **Schedule 6** presents this matrix and highlights whether the focus is of a primary, secondary or tertiary nature. The table indicates that there appears to be gaps in the training provided for: production management, cutting and grading. Training provided for these positions is either non-existent or provided in conjunction with full-time programs in designing. Because **Schedule 6** only indicates whether or not a course is offered, but does not provide any indication of how intensive the course is, we have provided additional program details in **Schedule 6A**.

Industrial sewing, a position for which industry indicated that training is required is only being provided by two institutions, Calgary Continuing Education and SAIT. Whole garment sewing, however, is included in nine programs and can be considered the primary focus of five of these. Some of the programs are training for "home sewing", however, many use industrial machines used by some manufacturers. Therefore, skills taught in these programs are of use to industry, especially to smaller firms.

4.3 Summary of the Interview Program

Discussions were held within institutions and industry regarding the training currently being provided in Alberta. The results of these discussions are highlighted in this section.

Institution Interviews

There appears to be no clear institutional leader to meet the industry's training needs. Most programming is fragmented with no one institution meeting the training needs of the industry. Enrollments in these programs are usually low but are at capacity.

Discussions with representatives from these institutions indicated that there is a willingness to work together with industry, government and among themselves to meet the industry's training needs. Also, there is a willingness, in some cases, to alter existing programming to meet those needs. Specifically, the various continuing education departments, Olds College and some design schools are open to changes. There is, however,

some concern by institutions over whether qualified instructors can be found to facilitate additional training. It should be noted that several of the manufacturers interviewed expressed an interest in assisting in training programs, whether through classroom instruction or lectures.

When asked what opportunities there were for providing unique training methods, the institution representatives most frequently mentioned the concept of a training centre. The basic concept is one in which training for the industry is provided in a central, separate facility. In addition to training, the centre would provide a "service" to industry through the use of CAD or cutting equipment on a fee basis. Further discussion of the training centre is outlined in Section 6 - Training Models.

Industry Interviews

The manufacturers and designers interviewed were asked for their comments and an evaluation of the various training programs offered in Alberta. This question revealed that most manufacturers are unaware of the training currently offered throughout the province. The majority of those interviewed were unable to comment on any more than one or two programs. For those comments received, most were not positive. Comments on each program are appended in Tables 13A to 13M Appendix 1.

Approximately one-third of the general comments made on Alberta schools indicated that they were unfamiliar with existing programs or they had had no contact with the schools. Only four comments were of a positive nature. Comments that were not positive tended to indicate that many programs were too theoretical and that training such as home sewing was not meeting the industry's training needs.

4.4 Conclusions

There appears to be no clear leader to meet the training needs of the industry. Programming is fragmented, with a number of institutions offering training for some positions and none for others (such as production management).

Discussions with industry and institutions indicated that there appears to be very little contact between these two groups. The industry is currently unaware of existing programming but at the same time, they think it is inadequate. Comments on existing

programs were generally not positive and emphasized the idea that these programs are usually too theoretical.

The institutions in Alberta providing training for the industry have organized themselves under the group known as Alberta Fashion Educators. This group is generally very receptive to making any alterations to existing programming that may be required based on the industry's concept of their needs.

5.0 ENVIRONMENTAL REVIEW

5.1 Introduction

We conducted an environmental review to identify the training models or initiatives currently in use elsewhere in North America. To identify these models we interviewed a number of manufacturers outside Alberta; training institutions in Canada and the United States; industry associations and conducted a site visit to the Centre Specialise de la Mode du Quebec, a "service centre" operated by Groupe College Lasalle. We also reviewed the possible impact of the Free Trade Agreement on Alberta garment manufacturers.

5.2 Discussions with Manufacturers Outside of Alberta

We interviewed five garment manufacturers from Ontario and Quebec and five industry associations to determine existing training methods and identify difficulties with respect to finding skilled personnel. The interviews indicated that manufacturers find their demand for employees in sewing, cutting and maintenance exceeds supply. They try to find experienced personnel, but when they cannot, they settle for unskilled workers instead. Most have developed their own in-house training programs to train inexperienced people. Manufacturers that have to hire unskilled labour believe that the population of both unskilled and qualified workers seems to be declining. It appears that production level jobs are most difficult to fill, however, plant engineering entry level positions have also been difficult due to a lack of interest in this field on behalf of graduating students.

One reason cited for the difficulty in recruiting qualified people is that the industry suffers from both a poor image due to working conditions and low wages. The image problem seems to be discouraging people from joining the industry at any level. Wages are widely considered to be low in the industry in general and for production-level jobs in particular. This is cited as the reason that many training programs are underpopulated, turnover is high and recruitment is difficult.

New technology will change the nature of the work environment for apparel manufacturers. This change may be some time off as the introduction of this expensive technology is very gradual. Technology tends to reduce the skill level required in factory

Educational Institutions

	FIT	G.Brown	Lasalle	Phil.	Ryerson	Seneca	Southern
Sewing Program	no	yes	no	no	no	no	no
Apparel Mgmt.	yes	yes	yes	yes	yes	yes	yes
Design Program	yes	yes	yes	yes	yes	yes	yes
Degree	B.S.	-	DEC	B.S.	B.S.	-	B.S.
Length	1,2 or 4 Yrs.	4 Weeks 3 Yrs	3 Yrs	2 or 4 Yrs	2 or 3 Yrs	3 Yrs	2 or 4 Yrs
Tuition	$1,730	$650	$525	$7,900	$1,400	$650	$1,634
Require.	H.S. portfolio SAT	H.S.	H.S.	H.S. SAT	H.S. portfolio	H.S.	H.S. SAT
Work-Study	yes	no	yes	yes	yes	yes	no
Tech. Quotient	high	low	high	low	low	low	low

jobs as well as the number of people needed. It is not clear whether the reduction in the number of jobs will be significant.

The manufacturers we spoke to provide training in-house or on-the-job. These companies would rather train their own employees than hire people trained elsewhere.

5.3 Training Provided by Institutions Outside of Alberta

To determine what training is being provided outside Alberta, we held discussions with seven of the educational institutions providing programs aimed at the garment manufacturing industry.

Our discussions indicate that all of the major schools have industry advisory boards which advise on curriculum and technology. The focus of these groups is increasingly on public relations. On the basis of our small sample(s), it is unclear how involved manufacturers are with local training or educational institutions.

Most institutions, with the exception of George Brown College, produce designers, merchandisers, and production design and control people. The special programs offered in community centres train people for sewing positions. Most of the applicants to the colleges are high school graduates. Increasingly, as the various programs become more developed, more mature students register.

5.3.1 Profiles of Institutions

George Brown

- George Brown is the only school which offers short courses to train for very low level positions such as sewing machine operators and mechanics. It also has production engineering programs - as well as design and merchandising.
- Requirements: high school diploma.
- Tuition: standard fee is $650.
- Program length: Apparel Manufacturing Management - two years; Power Sewing - 12 weeks ($18/week).
- Program for sewers is not as full now as it was when the government sponsored the students while they studied.

- At George Brown, the program is called the Apparel Manufacturing Management program.
- Assistant plant managers also train in marketing and finance at George Brown.
- George Brown trains for all "sewn products" which includes apparel, shoes, drapery, sheets, etc.
- Has a creative fashion design program.
- George Brown is known for producing operators and technicians rather than managers.
- Industry is very positive in general about George Brown.
- The school is known in both the U.S. and Canada.

Lasalle College

- Lasalle, the most high-tech of the Canadian schools, produces CEGEP graduates in design, merchandising and production. It does not train machine operators.
- School has very expensive computerized equipment.
- Private CEGEP - offers DEC (Diploma d'Etudes Collegiales) on graduation.
- Computer centre is not for the school but for industry.
- The curriculum is being updated next year to computerize 50% of the courses where only the two data processing courses were on computers before. This means that the students will train on the computer systems that are used in industry.
- Three year Production program based on tutor system where students receive experience but are not paid (this work experience called "stages").
- Production students spend two semesters over the course of three years in industry while Merchandising students work one day per week for ten weeks and five weeks straight in the third year.
- During the work experience periods, the employer is committed to offering instruction and tutoring to the student - the student is not just treated like another employee.
- All students have several jobs to choose from upon graduation.
- The school periodically has meetings with industry people regarding the curriculum.
- The Production program is only five years old and industry people had been extensively consulted beforehand to ensure that the training would be in-line with industry needs.
- Production is becoming a more popular area - there were eight people in the program in the first year and there are over 30 now.

- Fashion merchandising has been on the curriculum for 12 years.
- Most students are drawn from high schools - although some already have a CEGEP degree.
- New design courses in mens wear and jewelry came from discussions with industry people.
- Lasalle seems to have the greatest emphasis on high technology of all the Canadian schools. It does not produce operators but higher level technicians.
- Known for high technology equipment which industry people use for training.

Ryerson Polytechnical Institute

- Ryerson is the only Canadian institution which offers Bachelor degrees in Apparel Management as well as Design and Merchandising. Ryerson trains managers, not operators.
- Tuition: $1,400.
- Requirements: students must have a 60% average in Grade 13 courses for admission.
- Program length: Diploma - three years; Degree - four years.
- There are 150-160 students in the Fashion programs at Ryerson.
- The first year curriculum is common to all Fashion students. In the second year, they choose between a merchandising or design major. In the third year, the curriculum is further specialized: design majors specialize in either apparel management or apparel design. Merchandising majors specialize in either communications or retail merchandising.
- Design graduates generally work as assistants to designers, pattern designers, etc. Only the very best actually work as designers.
- Most production graduates begin as assistant production managers or equivalent - usually with larger firms - also work in quality control, etc.
- Those who work in smaller firms without manufacturing facilities of their own, take on the responsibility for contracting out the work and ensuring that quality standards are met, etc.
- Third and fourth year students work one day per week, usually unpaid, although some companies find that the student's contribution is such that they pay the student.
- The school finds it difficult to purchase up-to-date CAD/CAM, cutting machines and computer drafting equipment. The school has solved the problem by having the students train in companies which have this equipment until the school can afford the equipment.
- Currently, merchandising, communications and textiles students use the school's computer lab for their work.

- Ryerson grads are training to go into lower middle management. These grads are different from George Brown and others because they have a degree. They are trained in all areas, not only their speciality, as is the case with other schools.

- Ryerson's admission requirements are more strict than those of George Brown or the community colleges which only require grade 12 level. Ryerson requires 60% scores in grade 13 subjects.

- There are 25 students in third year Apparel Management, 20 in fourth year.

- The school accepted 160 students in first year this year. This is the largest class ever. The increase was possible due to an envelope provided by the government which gave the money as support for an industry with high demand for graduates. The government evidently feels more justified in supporting management grads rather than operators.

- The school is going to expand its fashion merchandising program due to the high demand for graduates and the interest demonstrated in it.

- Apparel management students focus on management and obtain a background in design.

- Ryerson's interest is in producing college-graduates who will eventually fill the upper-management positions in fashion companies.

- Ryerson is not mentioned by the industry people with whom we spoke, although it reports that its graduates are in demand and are all employed, mostly in Toronto.

Seneca College

- Seneca offers diploma programs in Fashion Arts (Design and Production) and Merchandising. It does not train machine operators.

- Requirements: applicants must have a high school diploma and Grade 12 English. Optional but desired are Art and Dressmaking skills.

- Tuition: full time annual tuition is $650.

- Program length: the program is three years and includes a total of three weeks industry experience.

- All students major in women's wear design.

- These programs are not usually oversubscribed.

Fashion Institute of Technology - New York

- FITS' production programs are divided into Engineering and Apparel production. It offers programs in Design and Merchandising. Like Ryerson, a Bachelor degree can be earned and the school does not undertake to train or supply machine operators.

- Requirements: high school, SAT or ACT.

- Tuition: U.S. $1,400 (New York State resident), U.S. $2,700 (non-resident).

- Program length: two year Associate in Applied Science, four year Bachelor of Science.

- The production programs produce 25 graduates annually. The program has been offered for 30 years.

- The school places emphasis on technology.

- In obtaining equipment, the school tries to have industry donate it rather than to buy it due to the close relationship between the schools and the manufacturers in large centres like New York.

- Two to three students are actually employees of a textile or apparel company whose education at FIT is being sponsored by their companies. They usually take the two year program or pick up special courses at FIT which, in combination with courses taken elsewhere, earn them a degree. Employees chosen to attend FIT have somehow demonstrated potential and presumably some indication that they intend to stay with the company sponsoring them.

- All students are encouraged and expected to work part time in New York during the school year and between semesters to obtain experience - to capitalize on the school's locale.

- FIT has an industry advisory board which reviews curriculum and consults on new courses.

- Most of FIT's students are drawn directly from high schools.

- Students in general are not aware of the career opportunities in this area so those who do apply have "done some checking". Often guidance counsellors are unaware of opportunities in this area.

- Overall placement of students in full-time jobs is very good. Production trained people probably receive the most offers.

- The Fashion Institute of Technology is widely known and is well equipped with the latest technology. It does not produce operators but managers.

- FIT is probably the best known school in the industry in North America. It has the most comprehensive programs. It is the largest school devoted to the apparel industry.

Centennial College - Scarborough,Ontario

- Requirements: high school diploma.

- Tuition: $325 annually.

- Program length: Apparel Merchandising - two years.

- Centennial's only fashion related program is in Fashion Merchandising.

Woods Gordon

Philadelphia College of Textiles and Science

- PCTS offers Bachelor degrees in various fashion disciplines. The school is not involved in training machine operators.
- Admission requirements: high school, SAT or ACT.
- Tuition: U.S. $6,400 per year.
- Length of program: four years - degree.
- Offers four year Bachelor of Science programs with 20 choices of majors.
- Fashion related majors are:

  Apparel Management
  Applied Textile Chemistry
  Color Science
  Fashion Design
  Fashion Merchandising
  Textile Chemistry
  Textile Design
  Textile Engineering
  Textile Management and Marketing
  Textile Technology

- Can do co-op program as part-time which is 15-20 hours per week or full-time which is 40 hours per week.
- Many jobs available for graduates.
- Apparel Management classes are not full.
- Fashion Design program is full - oversubscribed.
- 40-50 students in Apparel Management.
- Program consists of courses in:

  Production Management
  Quality Control
  Sourcing
  Plant Engineering
  Specification Writing

- PCTS is known by the other American schools and Ryerson.
- There is a very low drop-out rate in Apparel Management. They are having a difficult time finding students to enroll in the program due to lack of interest.

Southern Technical Institute

- Tuition and other fees are estimated at U.S. $1,323 annually for a Georgia resident and U.S. $3,600 for a non-resident.

- Admission requirements are a high school diploma with a specific number of courses in the core subjects.

- All applicants are required to take the SAT or ACT scholastic tests.

- Length of program: students may follow Association of Science Degree or Bachelor of Science degree programs in Apparel Engineering Technology or Textile Engineering Technology which are two years and four years respectively.

- The school requires that all four year students meet the core curriculum specified by the University System of George.

- The Apparel Engineering program is designed to train students in all functional areas of manufacturing.

- Students in Textile Engineering Technology are trained in the three areas common to all Southern Tech engineering technologies: communications, basic sciences and supervision. In the fourth area, Textiles, the student is given a broad program of courses in textile manufacturing.

Special Programs

- Small community based groups, whose primary interest is usually the education or integration of relatively unemployable women have periodically offered training as sewing machine operators.

Kitchener Board of Education Re-Entry Program

- Arrow has hired four women who were originally trained at the Job Re-Entry Program for Immigrant Women run by the Board of Education in Kitchener. The program was sponsored by the Minister of Citizenship and Culture but will not be funded again. The women were paid while in full time training - 16 weeks full time ESL and lifeskills training, 15 weeks of work with Friday afternoon session back at the centre for problem solving. The women were given the choice of receiving training in either needletrade, housekeeping or restaurant work.

- The program was an offshoot of the Kitchener Board of Education's regular ESL program. It responded to the need in the industry for these people and the need of the women to find jobs which they were capable of doing. John Forsyth (shirt company) had been recruited previously to ensure that the women would have jobs to go to. The company manager rejected the centre's offer to train the women on sewing machines, preferring instead to do the training in-house.

- The government has four requirements for admission: 1) the woman must have resided in Canada for at least three years (this restriction was waived in this case); 2) the woman must have been out of work for at least three months; 3) she must be legally able to work in Canada; and 4) she must require ESL.

- The last requirement effectively prohibits admission by Canadians. The women who formed the group were immigrants from various countries, primarily from Central America.

- This type of program is typified by women who join the program because they will be paid for the duration but they have no intention of working and quit the program when it comes to that point.

- There is a somewhat similar program going on in Waterloo. These women require ESL and are being trained for the needletrade, but will not join an established firm when they complete their training but will instead form a co-op company.

York Learning Centre

- The York Learning Centre operates a somewhat similar program in Toronto but on an ongoing basis and without government assistance. It has repeatedly applied and been denied government assistance for its power sewing training. The program lasts three months and teaches the students shortcuts to use in industrial sewing. When they leave they are ready to be trained by an employer on his machinery.

- The program was begun because of a need in the community for people with such skills. Applicants are people who cannot gain admission to community colleges either because they are not landed immigrants officially or because they do not have the educational base. The three month training includes lifeskills and academic upgrading. Applicants are mostly refugees. Because of their standing, they cannot gain admission in to programs which will pay them while they study. The program is always full. The training is given at the centre's entrepreneurial centre which also houses funded programs, thereby having these indirectly subsidize the sewing course. The program has been in existence for about three years.

- The centre has the help and guidance of an industry advisory board. These employers were the main catalyst for the creation of the program.

Summary

From our discussions with manufacturers outside the province, it appears that the problems facing Alberta garment manufacturers are not unique. Sewers and production managers are difficult to find in Ontario and Quebec and, the industry appears to have low wages and an image problem. Training programs are somewhat similar with the exception that production management is emphasized to a greater degree in programs outside Alberta.

5.4 Assessment of the Impact of Free Trade

5.4.1 Introduction

The clothing and footwear sectors have been major preoccupations of trade policy specialists and trade negotiators in the past 20 years in all industrialized countries. During this period, producers of these goods in the industrialized countries have been

challenged by low wage producers in the newly emerging industrialized countries, particularly from the Pacific Rim region. The result has been the erection of tariff and non-tariff barriers (in form of import quotas and other requirements), by many industrialized countries including Canada and the United States, despite a general work trend towards more liberalized trade in other manufacturing sectors.

The Economic Development and Trade data base utilized as a base for this study was not precise in terms of defining the question of export destination. The lack of precision in the question made it impossible to determine to what extent Alberta clothing and footwear manufacturers export to the United States or to other international markets. Statistics Canada information for apparel and apparel accessories for 1987 indicated international exports of $2.8 million from Alberta (Statistics Canada 65-003, Vol. 44, No. 4, p.34). This represented less than one percent of Canada's exports in this export category. Lacking specific information on the designation of the exports, it is assumed the principal international export market for Alberta manufacturers in these sectors now and in the future is the United States given the proximity and size of the market.

5.4.2 Measures to Improve the Competitiveness of the Canadian Clothing Sector

In support of the Free Trade Act (FTA) and in recognition of the sensitivity of the Canadian clothing sector, the Canadian government announced in March 1988 a three part program of tariff relief measures for the sector. This included:

- Tariff reductions on speciality fibre;
- A new duty remission program
- Announcement of a plan to reduce textile tariffs in the future to levels compatible with other industrialized countries.

These efforts should improve the competitive position of Canadian clothing manufacturers in the Canadian market.

The situation in the textile and clothing sectors is still the subject of Canadian and American government working parties who are sorting out the details. Given the lack of final detail at this time and the complexity of the situation in this sector, individuals with particular questions should check with government officials or their external advisors prior to acting on any of the proposed changes

FREE TRADE IMPACT MATRIX

	Local	National	Export
Undifferentiated			
Specialty or Niche			
Branded			

5.4.3 Implications of the FTA to Alberta Clothing Manufacturers

To provide an understanding of the possible implications of the FTA upon Alberta's clothing manufacturers, we developed a matrix dividing the industry by market orientation and by the type of production. The matrix is on the opposite page.

On the horizontal axis the markets are divided into local, national and export markets. The vertical axis is segmented into three categories. The undifferentiated clothing producer is defined as a firm which is not selling under its own label and/or could be acting as contractor for other branded firms. Firms in the speciality group are those firms which produce a limited line directed at a particular market segment. Examples of possible firms in this sector include manufacturers of uniforms and specialized athletic apparel, or producers of specialized work wear with particular features. Branded firms produce nationally or internationally recognized label lines which are generally available and known at the retail level.

Each firm's situation under the Free Trade Agreement will be different since it is impossible to generalize the impact on a firm without the consideration of a variety of factors such as ownership, management, production processes, competitive position, financial resources, service and in the case of the clothing sector, design is a major influence. Comments on the general impact in each of the blocks which comprise the matrix is provided together with some general observations on the possible strategies which firms in each segment may consider in the development of their own strategic response to Free Trade.

Undifferentiated/Local

While firms in this segment may find United States suppliers moving into their local market, the impact of the increased competition is not likely to be large. The local firms can protect their local markets by offering better service, knowledge of particular local market preferences, and better delivery than United States competitors. However, improvements in productivity and efficiency may be in order.

Undifferentiated/National

Manufacturers in this segment of the matrix may face higher competitive pressures than those in the Undifferentiated/Local group and should consider the same types of responses, but implemented on a more aggressive basis. Cost competitiveness is a very important factor in this segment.

Undifferentiated/Export

If contractors wish to expand into the United States market, they will have to improve their cost competitiveness and be in a position to undertake volume work. To accomplish this will require a high utilization of advanced technology.

Speciality/Local

Firms in this segment are likely too specialized to attract significant United States competition.

Speciality/National

In the national market sector, new United States competitors may appear. A careful examination of the cost of production should be undertaken relative to potential competition. Steps should be taken to ensure that productivity meets or exceeds that of the new competition.

Most importantly, firms in this segment should consider entering the United States market, to expand production, reduce costs and preempt competitors who may be considering the Canadian market.

Specialty/Export

Firms already in the export market have the opportunity to expand their exports under Free Trade. To continue to succeed, these firms must maintain quality, product differentiation, and value while ensuring costs do not exceed those of the United States competitors.

Branded/Local

Firms in this segment will face additional competition. Response strategies should include increased emphasis on design, productivity and efficiency. Firms which are acting as "branch plants" for the Canadian market because of current tariff advantages may wish to rationalize their production on a North American basis by offering cost or design advantages which may be achieved with the investment of computer assisted design equipment (CAD) or computer assisted manufacturing (CAM).

Branded/Export

Those branded firms already in the export market must continue to be efficient, low cost producers. Emphasis should be placed on design, quality and continued productivity gains. Such actions will secure and increase productivity.

Summary

The FTA potentially has implications on most segments of the Alberta clothing industry and will require varying levels of individual responses from nearly all firms, particularly those companies which rely on markets external to Alberta. Given the size and value of the industry and their potential responses, the FTA would have either positive or negative implications. Therefore, it is another competitive factor, which must be considered in the industry's evolution.

5.4.4 Alberta Manufacturers Opinions on Free Trade

We asked manufacturers what their opinion of the free trade agreement was. They were asked to respond either favorable, unfavorable, mixed or do not know, and provide their comments. **Schedule 7 outlines** the responses to this question.

SCHEDULE 7
OPINIONS OF ALBERTA MANUFACTURERS ON THE PROBABLE IMPACT OF THE FREE TRADE AGREEMENT

	# of responses
Favorable	46
Unfavorable	10
Mixed	15
Do not know	24
Did not answer	5
Total	100

As **Schedule 7** indicates, most Alberta manufacturers think that the FTA will have a favorable impact. Only 10 think the impact will be unfavorable; 29 respondents either did not know or did not respond to the question.

Overall, large firms (25+) were more in favor of free trade than smaller firms: 66% of large firms felt the impact would be favorable while only one felt the impact would be unfavorable. For smaller firms, 44% thought the impact would be favorable while 11% (nine firms) thought the impact would be unfavorable.

Comments regarding the impact of the FTA are appended in Table 18 Appendix 1. Selected comments include:

- There will be some problems; fabric will be cheaper; U.S. firms have the capital so it will be hard to compete.
- Competition from U.S. will squeeze out Canadian manufacturers.
- Will wipe the industry out; labour in the U.S. is cheaper - difficult to compete.
- Looking forward to it, we want to export more to the U.S.
- Will make our company more competitive; it opens up the U.S. market.

5.5 Conclusions

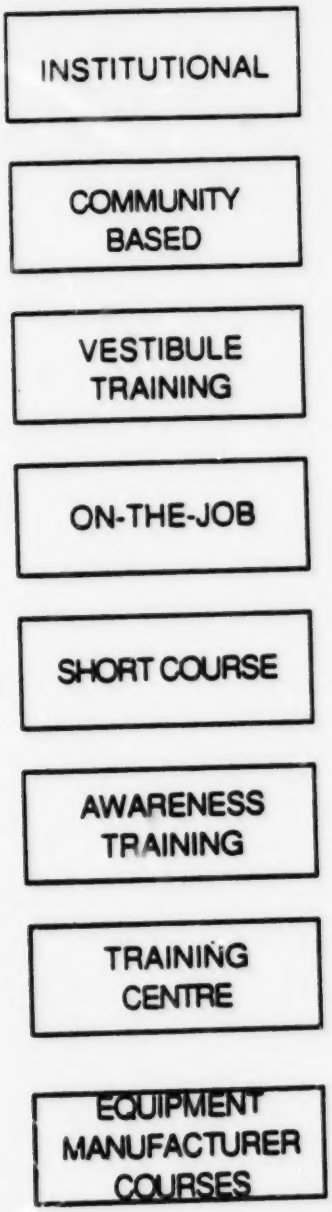
Discussions with manufacturers outside the province indicate that the training problems facing Alberta are not unique. Manufacturers outside the province have experienced difficulty recruiting sewers and finding experienced production managers. Their reasons are similar to those of Alberta manufacturers, such as the concern that the industry has a poor image or that wages are usually lower than those paid in other industries. Also, in-house and on-the-job training, the training method used by most Alberta manufacturers, is commonly used throughout the industry in Canada as a means of ensuring that firms have trained, competent employees.

Our review of training programs in place outside the province indicated that most schools tend to emphasize design and production management programs to a greater extent than is offered here. These programs tend to be two to three years in length and usually include a practicum component. A few training programs for production level jobs are available. However, as has been expressed by manufacturers and training institutions here, there is

difficulty attracting students to these courses. George Brown College is the only college offering sewing classes. In their case, enrollment declined significantly when federal funding of participants was cut-off. Class fees have been reduced to $18/week but enrollments have still not increased substantially.

A review of the impact of the Free Trade Agreement on Alberta garment manufacturers indicated that the FTA needs to be considered in light of an individual firm's circumstances. The FTA requires some response from all companies who rely on markets beyond Alberta, whether they be national or international. Given the size and value of the industry and their potential responses, the FTA will have either positive or negative connotations. Therefore, it is just another competitive factor that must be considered in the industry's evolution.

TRAINING MODELS



6.0 TRAINING MODELS

Through the course of our research ,we have identified eight different training models that might be used to deliver training for the garment manufacturing industry. In this section, we will describe these and provide examples of where they are or have been used.

6.1 Institutional Based Training

Institutional based training refers to training programs offered by established educational institutions for specific positions. There are examples of institutional based training here in Alberta and elsewhere. Some specific examples include:

- The tailoring program offered by NAIT in Edmonton.
- The production management program offered by Lasalle College in Montreal.
- The design program offered by the Fashion Institute of Technology in New York City.
- Industrial sewing offered over two semesters at George Brown College in Toronto.
- The industrial power sewing machine mechanic course at George Brown College.

6.2 Community Based Training

Community based training programs are defined as short courses offered through continuing education departments of colleges, universities or school boards. They may also be delivered through local community centres and may be either self funded or may have short term funding from government. Examples of community based training are as follows:

- Pattern grading course offered in two parts over 60 hours through the Continuing Education Department of NAIT.
- Industrial sewing course offered at the York Learning Centre in Toronto. The program runs for three months and teaches ten students who have been denied admission to colleges either because they do not have the educational base or because they are not landed immigrants. Funding is provided by the Centre itself and not through government sponsorship.

6.3 Vestibule Training

Vestibule training is formal training conducted on the company's business premises but in a separate area designated for training (ie., classroom). This method of training is in use by the Arrow Shirt Manufacturing Company which has a 32 week program to train sewing machine operators. The sewers train in a separate room for a specified number of weeks and then are moved to the production line.

6.4 On-the-Job

Under the on-the-job training method, skilled or unskilled employees are hired and their training is monitored by more senior personnel in the company. Training of this type may be either formal or informal. Examples of on-the-job training can be found in most Alberta garment manufacturing companies where floor supervisors instruct less skilled sewers in sewing techniques.

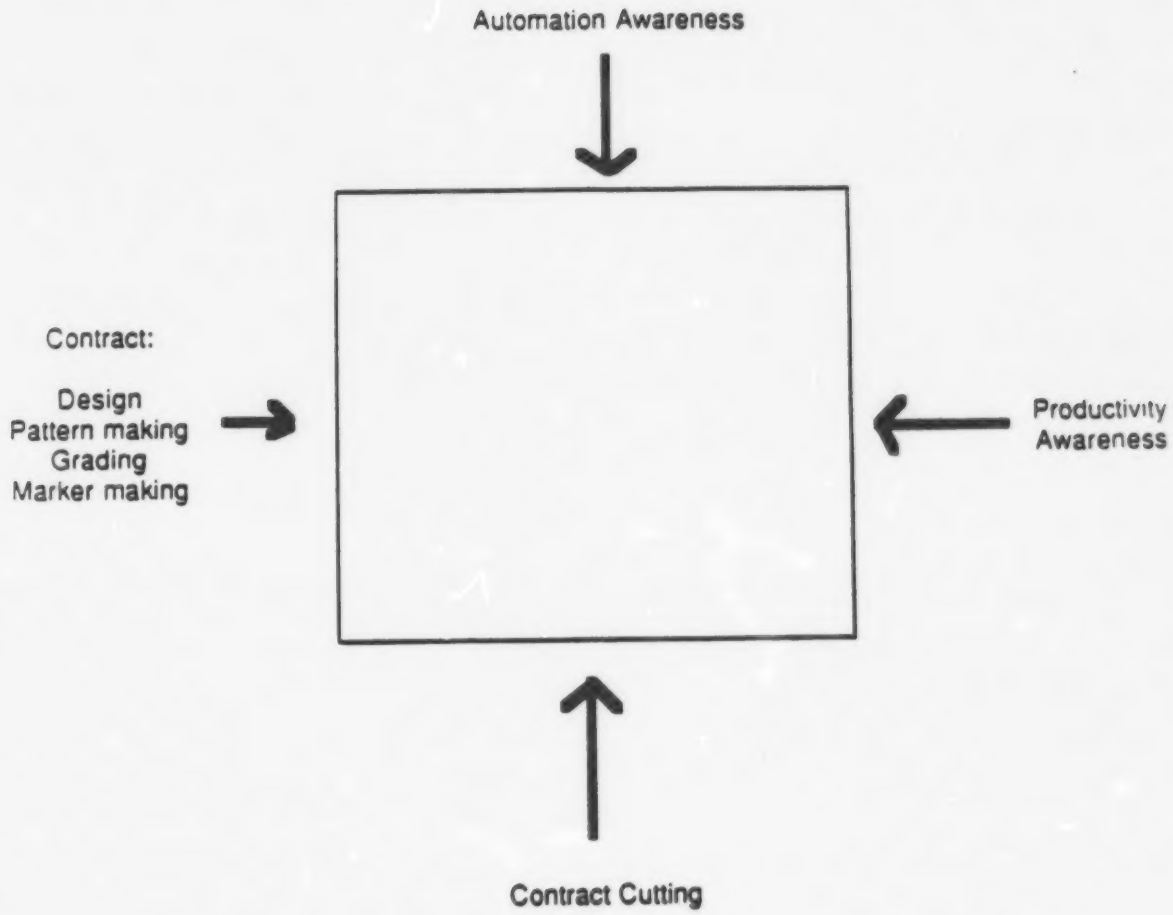
6.5 Short Courses Sponsored by Industry Associations

This training model consists of short courses, either one day seminars, or more formal courses, that are sponsored by industry associations. Unfortunately, we were unable to identify any examples of this model in the garment industry. Other industries do use this method. For instance, the Canadian Bankers Association offers a number of business courses to its membership.

6.6 Training Sponsored by Equipment Manufacturers

When new equipment is purchased, often a training component is provided by the manufacturer and may be included in the purchase price or offered separately. Such training programs may be delivered either in-house or elsewhere. Examples of this training model include: the training provided in-house to purchasers of Gerber equipment, and the course sponsored by Lectra to all firms owning the equipment delivered at Lasalle College in Montreal.

AWARENESS CENTRE



6.7 Training Centre

The training centre model involves a separate facility that would provide training for employees in or planning to enter the industry.

We have been able to identify two examples of training centres. The Quebec Hostelry Institute in Montreal provides training for those interested in pursuing a career in the hospitality industry. At the same time, the Institute operates a convention centre. The second example is the Manitoba Fashion Institute which operated from 1972 to 1982. The Centre offered courses in industrial sewing and provided engineering consulting services to garment manufacturers. The centre closed due to lack of government funding.

6.8 Awareness Centre

An awareness centre is a centre used for the incorporation of the latest technology used by an industry. The equipment is used to conduct contract work for individual clients as well as to provide the opportunity for manufacturers to view the equipment in operation.

The Centre Specialise de la Mode du Quebec operated by Groupe College Lasalle has Lectra equipment for designing, pattern making/grading, marker making and computerized cutting. The centre operates as a showcase of the benefits of computerization to the industry. The centre is open to any manufacturer who wishes to view the equipment in operation. The centre is one of 12 high technology production information centres in Quebec providing information to manufacturers in 12 different industries.

The centre has received funding for $1.5 million in equipment from a number of sources. The Quebec government donated the CAD design system in exchange for the centre's services as an information centre and, Lectra Equipment offered the cutting equipment at a significantly reduced price in exchange for the opportunity to tour prospective customers through the facility. However, the majority of capital was raised by the private college. The centre covers operating costs by charging clients for contracted design, pattern making and cutting services.

TRAINING NEEDS

- SEWERS
- CUTTERS
- MARKETING/ SALES
- PATTERNMAKING /GRADING
- PRODUCTION MANAGEMENT
- FLOOR SUPERVISOR
- HUMAN RESOURCE TRAINING

7.0 SUMMATION OF TRAINING NEEDS

Through our discussions with manufacturers and a review of the training in place in Alberta, we have developed a list of those positions for which training is necessary. Garment manufacturers indicated that there will be a growth in the demand for sewers, cutters and pattern makers, and that these positions are already difficult to fill. While some training for these positions is already available, it appears likely that a modification to existing efforts or additional training will be required.

In addition to the three positions outlined by manufacturers, we have identified an additional four positions which require training given the industry's growth projections. These positions are production management, floor supervision, marketing, and human resource training. As the industry grows, these positions will become increasingly important. In many smaller firms, production management is handled by the owner whose expertise may be in design. Also, as these firms grow, floor supervision is a position that will be added to firms as the number of sewers increase (usually 20 to 1 supervisor ratio). Marketing training, which was highlighted as a need by a number of firms, will become even more important if the firm is to capitalize on opportunities arising from free trade with the United States. The final position, human resource training, is significant because in the Alberta garment industry, most managers have taken on the responsibility of training their employees in-house. We view human resource training as "training the trainers" to ensure that on-the-job training is conducted in the most effective method possible.

In terms of the scope of the need, we have reviewed each of these positions separately. We have highlighted the need by number of individuals requiring training rather than the number of positions for which training is required.

7.1 Level of Training Required

Sewing

We estimate that there is an annual need for training for approximately 200-400 sewers. This estimate is based on a number of assumptions:

- Industry growth rate is approximately 10% annually based on 50% of the industry's estimate of growth as we viewed their projections as somewhat optimistic.

- Attrition rates of 3% and 10% were selected but are an estimate only as we did not review attrition in the survey. Attrition is defined for our purposes as departure from the industry as opposed to departure from the firm.

- Upgrading of existing employees would be approximately 3% of total employees based on the assumption that most of those currently employed would not be hired without either some basic skill level or aptitude.

- Existing employment was based on companies surveyed (Table 6 appended) and an estimate of employees working for those firms not surveyed. (Schedule 1 indicates that firms not surveyed have 455 employees; Table 6 indicates that sewers represent 55% of surveyed employment base).

Step 1: Existing Employment

Surveyed	1,330	(Table 6 Appendix 1)
Not surveyed	250	(55% of 455 employees)
	1,580	

Step 2: Requirement

	RANGE				
Growth	10%	158	10%	158	
Attrition	3%	48	10%	158	
Upgrading	3%	48	3%	48	
Total		**254**		**364**	sewers require training Therefore 200 to 400

Cutters

We estimate that training is required for approximately 40 to 80 cutters annually. The calculation used was the same as that of sewers. Again, the assumptions used were a growth rate of 10%, attrition rates at 3% and 10%, and an upgrading requirement of 6% of existing employed cutters. The calculation was based on an estimate of 275 sewers currently employed in industry.

Floor Supervisors

We estimate that there is a need for 10 to 30 floor supervisors in the industry per year. The assumptions used are the same as those used to estimate the demand for sewers:

- growth in the industry is 10%:
- the attrition rates of 3% and 10%
- upgrading is required for 6% of existing employees

The estimate was based on Table 6, Appendix 1 that indicates that 72 people are employed as floor supervisors in the 100 firms surveyed. We estimate that an additional 13 people are supervisors in the 100 firms not interviewed.

Pattern making/Grading

We estimate that training is required for approximately 50-90 pattern makers per year. Assumptions used for this calculation are a growth rate of 10%; attrition rates of 3% and 10%, and a requirement of upgrading for 20% of existing employees. The upgrading estimate is fairly high for pattern makers for two reasons: 1) probably more companies will support an upgrading program for their pattern makers compared to sewing and 2) because of the level of skill required for the position. The estimate of the training requirements for pattern makers was based on the 108 people who are pattern makers or do pattern making as part of their job, currently employed in the survey group and an additional 100 employees not surveyed who do pattern making as part of their job.

Marketing and Sales

Most of the Alberta garment manufacturing businesses do not have a "formal" marketing staff. Only 18 individuals in 200 companies have the position of marketing manager as their job or part of their job. We estimate that any firm with sales in excess of $500,000 should have a marketing or sales manager. Approximately 42 of 200 firms have sales in excess of $500,000, of which nine have marketing personnel in place. Assuming that those that do not have marketing staff require training as well as some upgrading of existing employees' in the order of 40 to 50 marketing personnel require training. We would target training programs to the owner/ manager as well as to those in the marketing and sales function.

Production Management

The survey indicated that approximately 45 individuals are involved in production management as part of their jobs and we estimate that an additional eight people are

employed in production management in firms not surveyed. It appears likely that there is training required for two groups, those being individuals interested in pursing a career in production management and secondly, upgrading for those already employed. In this second group we would include the owner/ manager of smaller firms who are undertaking this task.

We estimate that approximately 12 to 16 graduates per year would be required from a full time program. This number is fairly low, given the number of businesses that do not have production managers. However, many smaller firms will be unable to afford to hire trained managers and others would be unwilling. In addition to the 12 to 16 new production managers, we estimate that approximately one-half (25) of those already working will require some upgrading.

Human Resources

As the majority of firms train employees in-house, there is a need to "train the trainers" to minimize the cost involved in training. Of the 200 firms operating, we estimate that approximately 40 to 60 firms require this form of training. The estimate is based on the firms with greater than nine employees (50). However, it is our view that only 20 to 30 would actually attend courses in human resource training. The training programs under the heading of Human Resource training may include supervisory skills, organizational development, motivational training, stress management, and personnel planning. This form of training should be aimed at the owner/ manager of smaller firms.

7.2 Conclusions

Overall, the number of people requiring training yearly is relatively low in number but high in relation to total number of people employed in the industry. Anywhere from 370 to 720 individuals requiring training or 13% to 21% of total existing employment in the garment manufacturing industry. Although the number of people requiring training is low in absolute terms, it should be noted that it may be difficult to find the people to be trained for these positions. Sewing programs should be targeted to immigrants who may be interested, and have the requisite skills for working in the industry. This will require a steady flow of immigration into the province in the short term.

Through the course of our research, we have identified seven positions for which training is required and have made an estimate of the magnitude of that training need. Schedule 8 indicates the positions requiring training and the number of individuals involved.

SCHEDULE 8
NUMBER OF EMPLOYEES REQUIRING TRAINING BY POSITION

Position	Range
Sewers	200 - 400
Cutters	40 - 80
Pattern makers	50 - 90
Floor supervisors	10 - 30
Production management	12 - 40
Marketing management	40 - 50
Human resource management	20 - 30
	372 - 720

8.0 MATCHING OF MODELS AND NEEDS

In this section we will present a number of options for providing the necessary training for each position. To conduct the analysis of options, we looked at a number of factors such as the volume of the requirement for training; the cost associated with the various options; existing training and geographic location.

8.1 Sewing

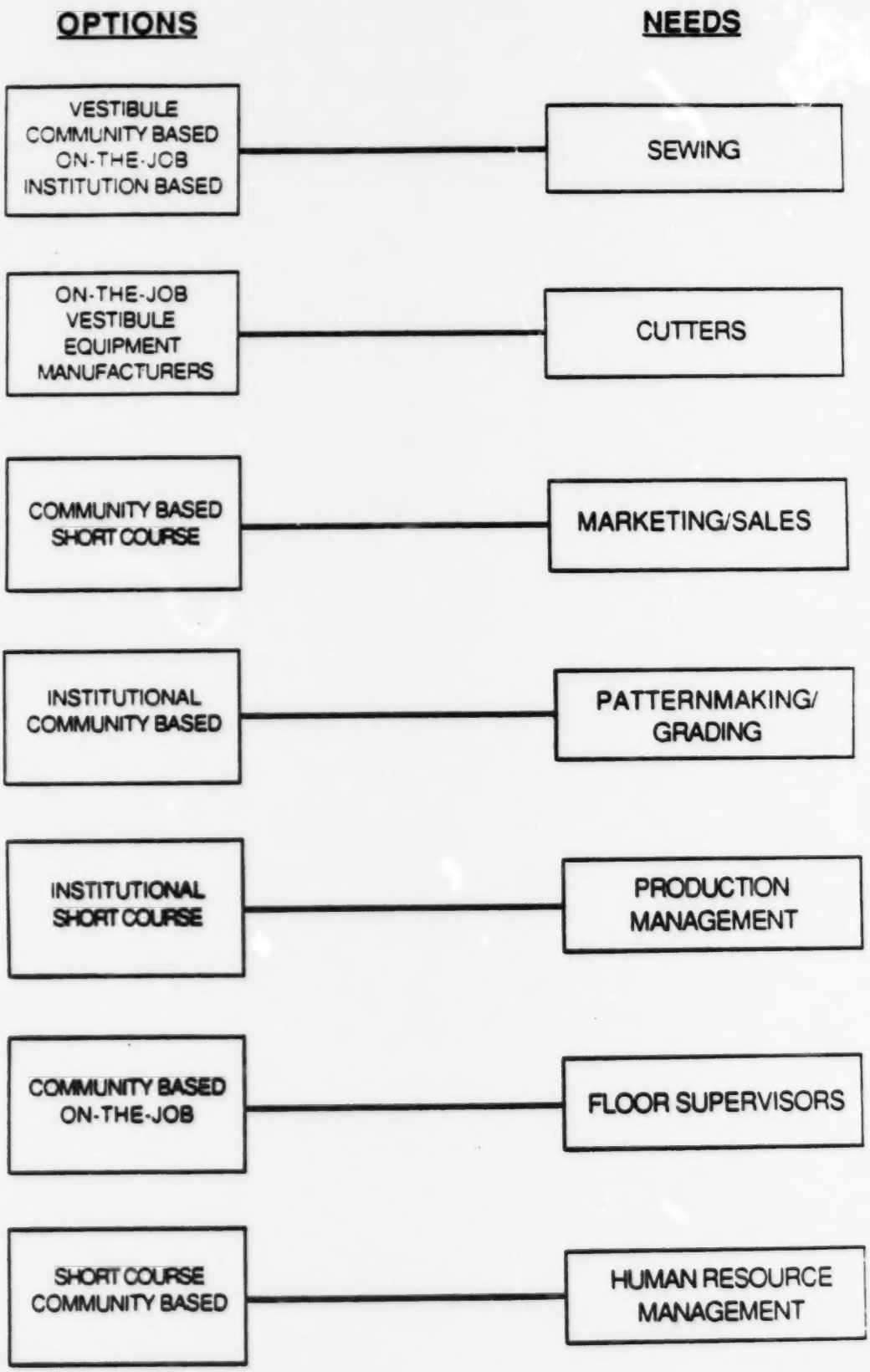
We have identified four training models that could be used to provide training for sewers. These are vestibule training, community based training, on-the-job training and institution based training. We have reviewed each of these based on the factors we highlighted earlier. Of the options presented, we prefer the vestibule, on-the-job and community based training approaches.

Vestibule Training

Vestibule training is more appropriate for companies of a size in which at least four sewers require training at one time. This would tend to be companies with greater than 25 employees, of which there are 22 in Alberta. This type of training would ensure that sewers have the specific skills required by that firm and would avoid the problem cited by some manufacturers that sewers have to be "retrained" after attending sewing classes.

The costs associated with providing vestibule training include the instructor's time, sewers wages, materials, and perhaps, capital costs if additional machines are required. If financial assistance was provided to manufacturers to set up systems such as this, there should be some method of ensuring that employees are in fact being trained in a classroom environment. The requirement of vestibule training is that the employee is trained in a classroom environment rather than on actual production. As a result, if this form of training was funded, it would be easier to ensure that the training funds were not being used as a "wage subsidy".

Many of the Alberta firms indicated that there is a great deal of movement between companies. It is therefore possible that many of the people trained through vestibule training at larger firms may eventually work for smaller firms that cannot afford to hire


OPTIONS
NEEDS
VESTIBULE
COMMUNITY BASED
ON-THE-JOB
INSTITUTION BASED
SEWING
ON-THE-JOB
VESTIBULE
EQUIPMENT
MANUFACTURERS
CUTTERS
COMMUNITY BASED
SHORT COURSE
MARKETING/SALES
INSTITUTIONAL
COMMUNITY BASED
PATTERNMAKING/
GRADING
INSTITUTIONAL
SHORT COURSE
PRODUCTION
MANAGEMENT
COMMUNITY BASED
ON-THE-JOB
FLOOR SUPERVISORS
SHORT COURSE
COMMUNITY BASED
HUMAN RESOURCE
MANAGEMENT

experienced sewers, thereby reducing the requirement for training programs aimed at smaller firms that may not have the resources to provide training.

Community Based Training

This type of training represents short (say 14 weeks) courses in industrial and whole garment sewing that could be offered through continuing education programs at SAIT, NAIT, or through the schools boards. This form of training would provide an opportunity for anyone interested in entering the industry to learn the required skills. However, we expect only a small proportion of "walk-ins" would enroll as there is limited opportunity in terms of career pathing and the industry has an image problem. This model would also provide training for employees that manufacturers may sponsor to attend. However, may manufacturers would be cautious about sending employees for two reasons: 1) they have no guarantee that the employee will remain with the firm after the training has been paid by the employer; and 2) there is fierce competition for sewers and some companies may be unwilling to expose their staff to sewers working for other firms where they may "compare notes" on firms.

SAIT and Calgary Continuing Education are both offering industrial sewing classes at this time. In Edmonton, no courses in industrial sewing are offered, however, a number of whole garment sewing classes are held. Costs to develop new courses or make adjustments to existing programs would be incurred for course development, instructors, capital equipment, facility rental and administration.

On-the-Job Training

This method is the most commonly used form of training employed by Alberta manufacturers. The reason is two fold: there is little training provided through educational institutions and, secondly, it is perceived to be the best method of ensuring that the employees have the skills required by the firm.

Any assistance provided for on-the-job training would probably be in the form of a subsidy. Assistance for on-the-job training would benefit firms of all sizes. However, it is probably the best delivery model for small to mid-sized firms since vestibule training is unlikely for these firms.

Institution Based

The final model we chose as an option to provide training for sewers is institution based training. George Brown College offers this form of training through a two semester course for $18 per week One advantage of this form of training is ease of delivery. NAIT or SAIT would both be viable places to offer such a course. Course development could consist of the purchase of the course from George Brown College or be developed with the input from an industry advisory board.

The disadvantages are as follows:

- immigrants unfamiliar with English may be intimidated by attending classes full-time at these locations;
- demand may be low if students are not subsidized, as was the case at George Brown;
- this form of training is not as flexible as community based training to changes such as low enrollments;
- NAIT and the university would probably be unwilling to provide such a program.

Certification Scheme

The possibility of developing a certification scheme for sewers was reviewed with survey respondents. overall, this was met with interest as 62% indicated that they would support the idea. However, we believe that this program would be difficult to implement as skills are not as standardized as they might be for other jobs that utilize certification schemes. The primary difficulty in implementing such a program at this time is the fact that as sewers are in short supply at this time, there is little incentive to the sewer to apply for certification. Also, most respondents indicated that their sewers would probably not seek certification unless there was a promise of higher wages.

8.2 Cutters

To provide training for cutters we have selected on-the-job training, vestibule training, and training by equipment manufacturers as possible options. As the number of persons requiring training is relatively low (40 to 80) and material costs would be very high, we have excluded community based courses from this review.

The best option is **on-the-job** training where more experienced cutters train new employees. The machines are relatively easy to use (however dangerous) but speed and accuracy are the key skills to acquire. These are "learn by doing" skills that are best learned by practice on the type of fabric used by the firm. The cost of this option would be in the form of a subsidy for wages during the specified training period.

Vestibule training is an option for providing training for cutting also. This would probably be relatively expensive in terms of fabric costs. However, as a variation to this method, an instructor could be contracted to service small firms that would only have one cutter or for firms just adding a machine. The instructors would train the employee on techniques in-house, perhaps in the evening or on weekends. Delivery costs would include wages for the contracted instructor and administration costs.

The final delivery method is **training provided by equipment manufacturers.** For firms that purchase new equipment, short instruction is usually provided, however, as we said earlier, speed and accuracy are the skills to learn so this would not be as effective.

Some firms may benefit somewhat from a "refresher" course that could be offered by manufacturers in the form of a one day seminar. For new computer cutting equipment, instruction through the manufacturer would be the most effective, however, very few firms in Alberta have this equipment at this time.

8.3 Marketing

Training in marketing for **garment manufacturers** would be required for two groups: one being those **already in the business** who wish to upgrade their skills, (the owner/ manager and sales **manager) and secondly,** for new people wishing to enter the business either as an employee **of a firm or perhaps** for a designer who may wish to open a business. To provide **training for both these groups** combined, we have selected community based training and short courses as options.

In the case of **community based** courses there may only be a need to identify two or three generic marketing courses offered through continuing education or faculties of extension in both Calgary and Edmonton. The second need is for specific courses aimed at marketing and sales issues for the industry. The courses could be offered in both cities

through continuing education in the evenings. The problem with this option is the time involved. In Alberta, the marketing manager is typically the busy owner/manager in smaller firms who cannot commit a lot of time to taking courses even if they are held "after hours".

Delivery costs for existing marketing courses would include either the cost of providing information and/or subsidies to attend. For new, community based courses, program development, instructors fees, materials and perhaps financial assistance for attendance would be the major cost.

Short courses offered by industry associations is the second possible delivery mechanism for training in marketing for the industry. These one or two day seminars are usually coordinated and delivered by industry associations. As the Alberta garment manufacturing industry does not have its own association, there are other possible groups. These include Alberta Fashion Educators, Foundation of Alberta Designers and the Fashion Council in Edmonton and Calgary. If any of these associations were used, the funding for development and delivery would have to be provided as most are non-profit and do not receive government assistance. This model would have the advantage of not being as time consuming as short courses and would be very industry specific . The same course could easily be held in both cities.

8.4 Floor Supervisors

To provide training for floor supervisors we have identified two options: those being community based training and on-the-job training. Both of these options would be effective in providing the skills required for the position.

On-the-job training would involve the training of the floor supervisor by the production manager. This form of training would again ensure that the supervisor was trained in the techniques used by the company. This method would probably be preferred by many manufacturers who would be unwilling to send their supervisors to a course where they would be exposed to people from other companies that may "steal" the supervisors. This was a concern voiced by a number of manufacturers.

Costs involved in on-the-job training for supervisors would probably include some form of wage subsidy or training allowance for the supervisor.

Community based training is also an option for the training of supervisors. The course would include training on supervisory skills and may include an ESL component. Many companies indicated that it was essential that the supervisor be able to speak and read English.

The course would have to be taught by an experienced production manager or senior floor supervisor with experience. A capable and willing instructor may be difficult to find. As noted earlier, many companies may be unwilling to send their employees on such a course, preferring to train in-house.

8.5 Production Management

As was the case in marketing, training for production management is required for two groups, those already working in the industry who require more formal training or upgrading, and secondly, training for individuals who may wish to enter the industry at this level. The two models we have matched with this position are institutional based training and short courses.

Institutional based training would involve the development of a two or three year program specific to production management for the garment industry. The program would be aimed at anyone wishing to enter the industry or of course, any one already working that would go back to school for training full time.

A similar program is offered at Lasalle College and has been quite successful. The program objectives are:

- learn to plan, program, control and manage production in a factory;
- select products, equipment and production methods;
- start and authorize operations;
- maintain cost control and manage purchasing, stocks and other material resources;
- coordinate services, and manage and train personnel.

This program could be "purchased" from Lasalle College. Rough cost estimates based on discussions with B. Bessim Associates, the consultant who designed the program, are

$300,000 for six courses, $50,000 in capital costs, and $45,000 for an automated equipment workstation. The courses could be offered at SAIT or NAIT. If this program was implemented, specific courses related to production management could be offered through continuing education.

The second model to provide training for production management is through **short courses.** Again, as there is currently no industry association in place and an appropriate delivery group would have to be identified. Again, FAD or the Fashion Council might be approached if appropriate funding was provided. The exact courses to offer would have to be developed in conjunction with industry but may include time and motion study for garment assembly operations, production planning and scheduling, and plant and factory layout specific to the industry.

8.6 Pattern making/Grading

The survey of 100 manufacturers indicated that only nine people had the job of "pattern maker", and one of grader, however, an additional 99 did pattern making and 78 did grading as part of their jobs which often included designing. This indicates that pattern making and grading seem to be the technical skills that should be refined by those learning designing. There is the problem, however, that students do not necessarily want to train to be designers and then accept a job as a pattern maker.

The **institution** model has been identified but it is not proposed that a new program would be designed. Technical skills such as pattern making and grading should be emphasized to a greater extent than is done at present in design schools and technical schools in Alberta. The survey indicated that the industry is under the impression that these schools are not providing these technical skills currently. These schools should be made aware that these skills are in demand by industry and that greater emphasis will have to be placed on these skills if that demand is to be met.

The second delivery model suggested is **community based** training. Pattern making classes are offered through Continuing Education, NAIT, SAIT and the school boards at this time. It is likely that the industry is unaware of these courses or that they are not meeting their needs at this time (either through content or timing). The industry should be made aware of these courses and an evaluation of their applicability for industry should be conducted.

8.7 Human Resources Development

We reviewed the eight models and identified two that are the most suitable for "training the trainers" or owner managers for the garment industry, those being short course and community based training. Both of these models could be used to provide training for those businesses already in existence or for new start ups rather than for individuals wishing to pursue a career in the garment industry. The content would include basic organizational analysis, motivational techniques, stress management and personnel planning.

The **short course** model consists of short courses sponsored or delivered by an industry association. As noted earlier, there is currently no garment industry association but FAD, the Fashion Council or Alberta Fashion Educators may be willing to coordinate these seminars if funding was provided. Costs would include course development, instructors' fees, and administration costs.

The second model is **community based training** as a means of providing human resources training. Courses provided through this method would be longer in length than those sponsored by associations. Costs would include course development, instructors' fees, and administration costs. It should be noted that it may be difficult to find a suitable instructor for these courses.

8.8 Training Centre

The training centre model could be used to provide training for all of the positions identified by the industry. The centre could be a central focus for the industry for training and to bring the industry together. Such a centre would raise the profile of the industry in the province. That higher profile may attract better staff to the centre and perhaps, encourage more young people out of high school to train for the industry. Also, the training centre would have the ability to be responsive to the industry's training needs.

In order to make such a centre viable in the long term, it would have to teach current and state-of-the-art techniques. Therefore, such a centre could be an awareness centre and a training centre.

One of the problems with the concept of a training centre is the cost involved in setting up such a centre. We are unsure as to the exact costs of such a centre but estimate the following:

Automated CAD equipment	$1,500,000
Industrial sewing machines (10 X 4,000)	40,000
Other equipment	80,000
Course development	1,000,000
Leasehold improvements	100,000
	$2,720,000
Building lease	100,000
Operating costs	1,000,000
	$1,100,000

Start-up costs would be in the order of $2,720,000 and ongoing operating costs would be over $1.0 million. Other problems include the difficulty in deciding whether to locate such a centre in Calgary or Edmonton, given that the volume required is fairly low and that two centres would not be required. As a potential method of funding such a centre, it could be developed as a contract service centre as well.

A final problem with the "centre" concept is location selection. The "two city" nature of the industry creates an economies of scale problem. In addition because such a centre may serve as a catalyst for the industry, the industry in that city may grow much faster than the other city.

9.0 STRATEGIES FOR CAREER DEVELOPMENT

What should be done to meet the industry's training needs depends on the growth prospects of the industry and the priority government assigns to the industry from an economic development standpoint. As we are unable to assess the level of priority the government will assign, we have developed three scenarios in which to present our recommendations. The scenarios are as follows:

Scenario 1 - a high priority assigned to the industry
Scenario 2 - government is uncertain as to the level of priority to assign.
Scenario 3 - government to assign a medium level of priority to the industry

9.1 Scenario 1 - High Priority

If the government decides to assign a high priority to the development of the industry and if other government studies support growth potential for the industry, then a training centre for the industry is a strategy that could be pursued. Unfortunately the scope of our work did not include an "independent" assessment of growth potential and we are unable to determine the level of growth the industry can achieve and what it would take to sustain that growth level. However, if we assume under this scenario that the government will assign a high priority to the industry's development we have outlined what should be done to facilitate training to meet the demands of that growth.

Under this scenario, we recommend a review of the feasibility of the development of a training centre combined with an awareness centre. The purpose of which would be to provide a central focus for the industry, a facility where training would be provided to upgrade existing employees and present a high profile for the industry locally and nationally which may serve to attract individuals who had not considered the industry as a career option. The centre should include the latest advanced technology equipment that would serve as a showcase for where the industry is going and provide an opportunity for Alberta's manufacturers to view first hand the potential benefits to their organizations of this technology. This service would be invaluable assuming that state-of-the-art equipment will be essential to success in the industry in the medium to long term.

In addition to providing training, and the "awareness" function, the centre would have to operate as a "service centre" to offset operating costs. The awareness centre in Montreal operates in this way quite successfully. Service centre is a means whereby manufacturer

can either use the equipment on a time-share basis or contract out services such as designing, grading or cutting.

Training conducted at the centre would include training for sewers, cutters, floor supervisors and pattern makers. Existing design programs could include a session at the centre to teach students how a manufacturing operation works. A formal 2 to 3 year program for production management would be an important component to the centre as production management will be essential to industry growth.

With reference to how the centre would be managed, we have devised 4 options. These are as follows:

1. **Management board**: The centre could be operated as a not for profit operation. Under this option the profits from contract would be used to partially support the training programs of the centre. The centre would have a management board comprised of representatives from industry, government and training institutions.

2. **Industry**: The government could provide support to and individual or manufacturing operation that would be interested in providing this service. There may be a number of problems with this approach including the difficulty of fair access. The individual may place the needs of its own operation above those of the client and training programs; also, other competitive manufacturing firms may view the support of the operation as a subsidy to their competition.

3. **Crown Corporation or agency:** The centre could be set up as a crown corporation or agency as is the case with the Electronics Test Centre managed by a separate board but funded by the Alberta Research Council and the Alberta Special Waste Management facility which is operated as a crown corporation. However these crown corporations are generally not popular with industry.

4. **Existing Institution:** The training centre could be developed in conjunction with an existing educational institution. This is a possibility however it may be difficult to identify sufficient space to house the facility on existing campuses; many individuals training for the industry may be somewhat intimidated at attending large institutions such as SAIT. Also, there may be difficulty in transporting fabric etc. into the existing building at educational institutions. An offsite location could be selected to overcome these problems. However, it may be dificult for an educational institution to effectively operate a successful contract operation as this is usually beyond the areas of expertise of traditional institutions.

The centre concept is not without problems however. There is an inherent conflict between training and providing a service to clients for a fee. Training would have to be secondary if the centre is to have any credibility as a service centre. Also, costs would be high and administration may be difficult. There is also the problem of selecting the city in which to locate the centre. Given that only 370 to 720 individuals require training at the

most, only one centre is warranted. Also, there is the problem that it is unlikely that anyone from Calgary would attend classes at the centre in Edmonton for a short term class or vice versa, the result being that enrollments would be lower yet.

Costs for the centre are estimated at $2.75 million for start up costs and an additional $1 million for operating costs. The funding of such a centre would involve the combined efforts of Career Development and Employment, Economic Development and Trade, Western Diversification and industry. It is likely that industry would support such a centre. When asked about the centre concept most indicated that they supported the concept, would send employees there for courses for a fee and would consider having contract work done at the centre.

We recommend that if the government intends to assign a high priority to the industry a training centre should be considered. Before the concept was endorsed, however, a study of the centre's feasibility should be undertaken and a more complete analysis of alternative organizational concepts explored.

9.2 Scenario 2 - Priority Uncertain

If the government is uncertain as to the priority to assign to the industry, there are a number of things that they can do to facilitate training to meet the needs identified. The goal would be to provide or facilitate training for all eight positions for which a need has been determined. However, given that funds to support training may be somewhat limited, we have priorized the positions and recommend that at least the top four be implemented. The approach to a strategy for providing training for all positions should include the following:

- Industry input into curriculum development possibly through an "advisory group" or through discussions with a number of manufacturers. Career Development should coordinate this effort.
- Working closely with the associations as a means of providing information to manufacturers as well as utilizing them as a delivery model for some courses.
- Ensure that overall existing training institutions are aware that their programs are either not responsive or perceived as not responsive to the training needs of the industry.

We have presented our strategy for training for each position by identifying the delivery model, the reasons for the recommendation, how it should be implemented and possible funding mechanisms. While not a position we have also included our recommendations regarding English as a second language training in this section.

Sewing

While all four of the options presented as a means of providing training for sewers are viable, we recommend that training for the 200 to 400 sewers be provided through community based, on-the-job and vestibule training. The three types of training will cover off training for both new individuals who wish to learn through a classroom setting and for employers who prefer to train in-house to ensure that employees have the skills required by that company.

Community Based Training

Career Development should coordinate the development of industrial sewing classes in both Edmonton and Calgary. Classes in Calgary offered by SAIT and the Calgary School Board Continuing Education should be reviewed by an "industry advisory group" to ensure that curriculum is appropriate. Career Development could coordinate this effort. Edmonton School Board Continuing Education have expressed an interest in providing these classes if a need was identified. The need should be conveyed to them by the department and course development should be initiated.

Programs should be targeted to immigrants interested in training for the industry. However, the program would be open to anyone else who may apply. The Department of Education may be willing to disseminate information on training for the industry; however, career paths are limited. Career Development should ensure that manufacturers are aware of these courses and encourage them to send their employees for training or refer untrained applicants to the program.

A review of the requirements for funding under the Program Support component of Career Development's Alberta Vocational Training program (AVT) indicates that funding may be available under this program now or with some modifications. Under that program, grants are paid directly to institutions providing training. Financial assistance to attend classes may be required to attract individuals to these courses. Funding for

participants may be accessed through the Student Support Program of AVT if the individual meets the requirements.

Vestibule and On-the-Job Training

These two training models should be provided on an ad hoc basis for firms wishing to participate. Training of this type would be most responsive to the training needs of sewers.

Sewers training on-the-job or in vestibule training might be eligible for some funding assistance through the Alberta Training Program. Modifications to the program may be required to ensure the training is eligible.

Career Development should inform manufacturers that assistance is being provided for this form of training.

Marketing

The Department should facilitate training in marketing through both the community based model and the short course model.

The Department should identify two or three "generic" marketing courses available through Continuing Education or faculties of extension in both Calgary and Edmonton, and inform manufacturers that these courses are available. Financial assistance in the form of one-half of tuition costs should be funded by Career Development to encourage participation in these courses. Marketing training was identified as a need and is essential from an economic development standpoint.

Career Development should facilitate the development of "short courses" in marketing specific to the industry. The Department should determine if Economic Development and Trade might be willing to provide some assistance (financial or otherwise) in the set up of these courses as efficient marketing techniques are important from an economic development standpoint. The Department should identify an appropriate association to undertake the delivery of the program, or, as an alternative, direct this initiative themselves.

Course development should be contracted to a consultant experienced in the marketing needs of the industry. Program costs should be covered on a "user pay" basis. However, the department should provide some financial assistance to attend these courses. Identical courses should be held in Edmonton and Calgary.

Program development costs might be eligible for funding under the Program Support component of the AVT program. Some alterations to the program to make funding available may or may not be required.

Production Management

If the government is committed to assisting in the development of the industry, then the development of a full-time institution based training program for production managers would be recommended. For this scenario, we have selected short courses as a means of upgrading the production management function in Alberta garment manufacturing firms given that under this scenario the government is uncertain as to the level of priority to assign the industry.

Career Development should facilitate the development of "short courses" in production management specific to the industry. The Department should identify an appropriate association to undertake the delivery of the program. FAD, the Fashion Council or perhaps Alberta Fashion Educators may be willing to undertake this role. Identical courses should be held in Edmonton and Calgary.

Course curriculum should be undertaken with input from an "advisory committee". Course development should be contracted to consultants experienced in production management. B. Bessim and Associates and Kurt Salmon & Associates are two examples of consultants that might be approached for this task. Alternatively, other institutions could be contracted for this service.

Funding for course development and delivery should be provided by Career Development or Advanced Education. Some of the cost will be recovered by course fees. Development of this program may be eligible for funding under the Program Support component of the Alberta Vocational Training program. Some alterations to the program to make funding available may or may not be required.

Vestibule and on-the-job training should be supported by Career Development.

Some assistance to manufacturers may be provided under the Alberta Training Program based on a review of the program description. Some alternation may or may not be required to make funding available for cutting training under this program.

Vestibule training done through a contracted trainer could be initiated by Career Development when at least eight firms were identified as committed to this form of training. The Department's role would be to identify a trainer and cover the administrative costs. The program would be on a user pay basis. Further, the Department should ensure that the industry is aware that this form of training is supported by the Department.

Floor Supervisor

Of the two options presented, on-the-job training and community based training, the Department should support on-the-job training and a modified version of community based training.

On-the-job training would be the best method of providing training for floor supervisors. Financial support for training may be available from the Alberta Training program. Modifications to make this training eligible may or may not be required. The Department should ensure that manufacturers are aware that assistance is available for training floor supervisors.

It is likely that few companies would be willing to send their floor supervisors for training at an institution; therefore, the Department's effort in assisting in this type of training should be limited. The Department should identify courses offered through Continuing Education that provide training in supervisory skills and provide information only on these courses. Courses should be offered in both Edmonton and Calgary.

Pattern makers/grading

To ensure that adequate training in pattern making is available, the Department need only provide a coordinating role. Programs already in place that are training designers should be informed that the industry does not perceive that these skills are being adequately taught and that these skills are in demand by industry. While many design students would not be interested in a position as pattern maker, some may and should be made aware of these opportunities.

Industry is unaware that pattern making and grading are taught through Continuing Education programs across the province. The schools should be made aware of this as should manufacturers who may send students. Again, the Department should relay this information.

It is possible that these courses are not delivering the skills needed by industry. An industry advisory group should review the curriculum to ensure that skills taught are useful to industry. The Department's role in this regard would be to coordinate this process.

Human Resources Training

The Department should facilitate the development of short courses to "train the trainers". The approach should be to introduce training through seminars delivered by one of the associations initially and develop the training into a more formal course offered through continuing education departments and faculties of extension.

It will probably be difficult to identify an instructor for this course, however, as in-house training is prevalent in the industry, it is important that this is done well.

The Department should approach the associations to solicit their support in delivering the training program. As many of those groups are non-profit, funding would have to be provided to cover their administrative costs. Course fees should be used to cover most of the delivery costs. If associations are unable or unwilling to facilitate the delivery of the program, then the Department may have to coordinate delivery.

This program may be eligible for funding under Career Development's Program Support component of the AVT program.

English as a Second Language Training

English as a second language was considered an issue by 16 of the largest firms surveyed, representing 65% of the employees in the industry. In-house training for ESL was preferred by these firms. Therefore, ESL training should be done on an ad hoc basis and conducted on the premises of larger firms interested in providing the training.

9.3 Scenario 3 - Medium Priority Assigned to the Industry

As a third alternative a phased approach to training and awareness development could be employed. The elements of this scenario include:

- implement the recommendations under Scenario 2 in year 1,
- initiate the planning for the development of a diploma program in production management in year 2,
- initiate planning for the development of the awareness centre in year 2 and study the support for programs developed in year 1,
- evolve the awareness centre into a training centre by incorporating the training programs developed under Scenario 2 after they have been accepted by industry.

This recommendation involves the implementation of both Scenario 1 and 2 but developed over time. The purpose of the staged approach is to allow the "kinks" to be worked out of individual programs, and to gain acceptance in the marketplace before they are formalized in a training centre, and for the demand for training programs to rise over time from the estimates of 370 to 720 individuals per year.

The first step in this Scenario is to implement the recommendations outlined in Scenario 2. The second step of this recommendation is the development of an awareness centre. This centre would provide the central focus for the development of the industry. The centre should include the latest in advanced technology equipment that would serve as a show case for where the industry is going and provide and opportunity for Alberta's manufacturers to view the benefits of this technology. The awareness centre should also provide contract services in design, pattern making, marker making and cutting, to offset

costs. The third phase of this scenario is to add a training centre to the awareness centre. some of the programs in place under step one could be transferred to the awareness centre with little interruption. Before the awareness centre is completed, a formal production management program should be developed.

The benefits of this staged approach are that the training programs will have the opportunity to become accepted in the marketplace; the awareness centre will generate interest in the industry both locally and nationally, stimulating industry growth and thereby increasing the demand for training programs.

9.4 Conclusion

Schedule 9 presents a summary of the type of effort required of Career Development to meet the training needs of the industry. As the schedule indicates, it is necessary for the Department to provide the coordinational effort required to set programs in place. However, their involvement in this role will not be on-going but should be viewed as an "investment" for ensuring that the industry's training needs are met.

A preliminary review of the existing departmental programs indicates that many of the initiatives recommended may be eligible for funding under these programs. It may be necessary to make exceptions to existing program guidelines (such as increasing funding levels) to ensure that these initiatives are funded under these existing programs.

What is also indicated, is that focussed marketing of programs directly to individual manufacturing operations will be required to actually obtain industry participation.

With reference to course development, this will be contracted out to consultants in most cases with the possible exception of the "train the trainers" courses for which it may be difficult to identify an instructor. In that case, it may be necessary for Career Development to undertake the course development. With reference to an extensive diploma program for production management in conjunction with a training centre, we would recommend the purchase of the courses from an existing program such as that of Lasalle College rather than have Career Development or any of the educational institutions undertake this task.

The selection of either Scenario 1 - a training centre/awareness centre, Scenario 2 - a "grab bag" of initiatives, and Scenario 3 - the gradual development of an awareness centre into a training centre, really depends on the level of priority the government assigns to the industry. As the scope of this study did not include a review of the industry's outlook relative to other sectors, we are unable to assess whether or not the industry should be assigned a high priority by government. However, as a minimum, we recommend that the department pursue the recommendations highlighted under Scenario 2 initially. If, as time progresses, the government decides to undertake initiatives to stimulate the industry, most of the initiatives (with the exception of on-the-job and vestibule training support) can be transferred to the training centre with little disruption as indicated in Scenario 3.

Woods Gordon

SCHEDULE 9

FUNDING SUPPORT REQUIRED OF CAREER DEVELOPMENT

Position	(1) Coordinating role	(2) Marketing/ Informational	(3) Funding from the Department	(4) Funding from existing programs	(5) Support of other department's required
Scenario 1 -					
Training Awareness Centre	X	X	X		X
Scenario 2 -					
Sewing	X	X	X	X	X
Pattern making	X	X			
Marketing	X	X	X	X	X
Cutting	X	X	X	X	
Production management	X	X	X	X	X
Floor supervision	X	X		X	
Human resources	X	X	X	X	
Scenario 3 -					
Same as Scenario 1 and 2 above					

(1) Career Development to coordinate the effort.
(2) Provide information either to industry or institutions.
(3) Use funding from the department but not from existing programs. Funding may be for the use of consultants for example.
(4) Use existing programs for funding.
(5) Other Departments such as Economic Development or Advanced Education.